DOCUMENT RESUME

ED 161 143 EA 010 960

TITLE	The Competency-Based Curriculum: Developing a Mosaic. Educational Forum Proceedings (Dunbar Senior High School, District of Columbia, April 7-8, 1978).
INSTITUTION	District of Columbia Public Schools, Washington, D.C.
PUB DATE	Apr 78
NOTE	101p.; Photos and Charts on pages 88-89 may not reproduce clearly
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	Conference Reports; Counseling; *Curriculum Development; Federal Programs; Organization; *Performance Based Education; Performance Tests; Program Evaluation; Student Evaluation
IDENTIFIERS	*District of Columbia

ABSTRACT

Included in this publication are presentations and summaries given at a forum designed to provide information about the status of the competency-based curriculum and its implications for competency-based education. On the topic "Instructional Support for CBC: Where the System Is Now," three presenters, James T. Guines, Wilbur A. Millard, and P. Gary Freeman, offered their views. William G. Spady spoke on "The Organizational Implications of a Competency-Based Approach." Mary F. Berry analyzed "The Federal Commitment to Student Achievement." James H. Block probed "Competency-Based Curriculum Competency Based Education: The State of the Art." On "CBC Validation, Monitoring and Evaluation," opinions were offered by four speakers: Herman Cobb, Marilyn T. Brown, Frank Snyder, and Mildred P. Cooper. Robert B. Farr reported on "Student Assessment and the Competency-Based Curriculum." Two participants, Susie B. Morgan and Nathaniel E. Hill, spoke on "Counseling and the Competency-Curriculum." Ruth S. Nickse addressed "Assessment of Life Skill Competencies through Applied Performance Testing." A summary of reactions to the forum is also included. (JM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

SCOPE OF INTEREST NOTICE
The ERIC Facility has assigned this document for processing to: EA UD
In our judgement, this document is also of interest to the clearinghouses noted to the right. Indexing should reflect their special points of view.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED161143

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Mildred Cooper
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

Public Schools of the District of Columbia

Educational Forum

The Competency-Based Curriculum Developing A Mosaic

Dunbar Senior High School - April 7,8, 1978

EA 010 960

Educational Forum Proceedings

PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA
OFFICE OF THE SUPERINTENDENT
PRESIDENTIAL BUILDING
415 12TH STREET N.W.
WASHINGTON D.C. 20004

SUPERINTENDENT

(202) 724 4222

Dear Friends and Colleagues:

The Public Schools of the District of Columbia draws it major strengths and weaknesses from the community it serves. Therefore the success of our educational program depends largely upon public understanding of what we are attempting to do. The Educational Forum promoted this concept. It brought together representatives from parent, civic, business and education organizations, the federal sector, the City Council, the Board of Education, city universities as well as students, principals, teachers and central administrators. Children's learning will be enriched by our recognition of the responsibility we all share for educating the children of this city.

Our goals for the Forum were to provide intellectual stimulation, information about the status of the Competency-Based Curriculum and its implications for Competency-Based Education, and opportunities for interaction among participants. The more than one hundred respondents to the questionnaire we sent out to assess the effectiveness of the Forum told us it was a success. Some felt the need for more time to interact in small groups. Most felt it was a useful way to chart future directions.

I hope that this collection of ideas as they were presented at the Forum will refresh your thinking and serve as a useful reference.

Thank you for your interest and participation in this our first Educational Forum. We shall be having others. I welcome your continued support of our efforts to provide a first-rate education for our children.

Sincerely,

Vincent E. Reed

Vincent E. Reed
Superintendent of Schools

Contents

Instructional Support for CBC: Where the System is Now

James T. Guines, Associate Superintendent, Office of Instruction — 1

Wilbur A. Millard, Associate Superintendent, Office of Educational Programs and Services — 8

P. Gary Freeman, Assistant Superintendent, Region VI — 21

The Organizational Implications of a Competency-Based Approach

William G. Spady, National Institute of Education, Senior Research Consultant, Office of Instruction — 24

The Federal Commitment to Student Achievement

Mary F. Berry, Assistant Secretary, Department of Health Education and Welfare — 36

Competency-Based Curriculum
Competency-Based Education: The State of the Art

James H. Block, Associate Professor of Education, University of California At Santa Barbara — 42

CBC Validation, Monitoring and Evaluation

Herman Cobb, Director, Validation — 52

Marilyn T. Brown, Assistant for CBC Monitoring — 57

Frank Snyder, CTB/McGraw-Hill — 60

Mildred P. Cooper, Assistant Superintendent, Division of Research and Evaluation — 64

Student Assessment and the Competency-Based Curriculum

Robert B. Farr, Director, Pupil Appraisal — 69

Counseling and the Competency-Curriculum

Susie B. Morgan, Director, Guidance and Counseling — 72

Nathaniel E. Hill, Assistant to the Director, Pupil Personnel Services — 77

Assessment of Life Skill Competencies through Applied Performance Testing

Ruth S. Nickse, Developer: New York State Competency-Based External Degree Program, President: Nickse Associates, Ithaca, New York — 84

Reactions to Educational Forum — 86

Friday

April 7, 1978

8:00	**Registration/Coffee**	
8:30	**Opening General Session**	
	Presiding	Harris M. Taylor Associate Superintendent Office of State Administration
	Welcome	Conrad P. Smith President Board of Education
	The Charge	Vincent E. Reed Superintendent of Schools
9:00	**Second General Session**	
	Instructional Support for CBC: Where the System is Now	James T. Guines Associate Superintendent Office of Instruction
		Wilbur A. Millard Associate Superintendent Office of Educational Programs and Services
		P. Gary Freeman Assistant Superintendent Region VI
10:30	**Coffee Break**	
10:45	**Third General Session**	
	The Organizational Implications of a Competency-Based Approach	William G. Spady National Institute of Education Senior Research Consultant Office of Instruction
11:30	**Group Interaction Sessions**	
12:30	**Feedback**	
1:30	**Lunch**	
	Introduction of Guest Speaker	Vincent E. Reed
	Keynote Address: The Federal Commitment to Student Achievement	Mary F. Berry Assistant Secretary Department of Health, Education and Welfare
2:30	**Fourth General Session**	
	Introduction of Guest Speaker	Elizabeth C. Yancey Vice Superintendent of Schools
	Competency-Based Curriculum Competency-Based Education: The State of the Art	James H. Block Associate Professor of Education University of California at Santa Barbara
3:30	**Question and Answer Period**	
4:00	**Adjourn**	

Saturday

April 8, 1978

7:00	**Breakfast**	
	Presiding	Norman W. Nickens Former: Deputy Superintendent, DCPS Dean of Continuing Education, WTI
	Exhibit of CBC Materials	
8:00	**Fifth General Session**	
	Presiding	Delores T. Davis Director Leadership Training Program
	CBC Validation, Monitoring and Evaluation	Herman Cobb Director Validation Study
		Marilyn T. Brown Assistant for CBC Monitoring
		Frank Snyder CTB/McGraw-Hill
		Mildred P. Cooper Assistant Superintendent Division of Research and Evaluation
9:00	**Sixth General Session**	
	Student Assessment and the Competency-Based Curriculum	James T. Guines
		Robert B. Farr Director Pupil Appraisal
	Counseling and the Competency-Curriculum	Susie B. Morgan Director Guidance and Counseling
		Nathaniel E. Hill Assistant to the Director Pupil Personnel Services
10:00	**Coffee Break**	
10:30	**Group Interaction Sessions**	
11:30	**Feedback**	
12:00	**Lunch**	
	Introduction of Guest Speaker	Wilbur A. Millard
	Assessment of Life Skill Competencies through Applied Performance Testing	Ruth S. Nickse Developer: New York State Competency-Based External Degree Program President: Nickse Associates Ithaca, New York
1:30	**Conference Summary**	
3:00	**Adjourn**	

Public Schools of the
District of Columbia
Educational Forum

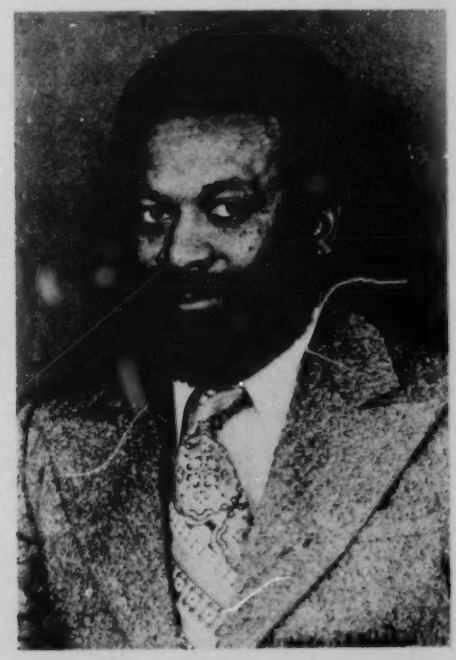
Dunbar Senior High School

The Competency-Based Curriculum

Developing A Mosaic

Ⓐ

A - Elizabeth C. Yancey
Vice Superintendent
B - R. Calvin Lockridge
Ward 8 Representative
Board of Education
C - Harris M. Taylor
Associate Superintendent
Office of State Administration
D - Delores T. Davis
Director
Leadership Training Program



Ⓑ

Ⓒ

Ⓓ

Instructional Support for CBC: Where the System is Now

James T. Guines
Associate Superintendent
Office of Instruction

What is the relationship to what D.C. is doing and its past practices?

The Competency-Based Curriculum in the D.C. Public Schools builds on many of the past practices relative to staff development, curriculum development and test development. The Board of Education's approval of the Competency-Based Curriculum provides for the first time in over a decade, instructional direction which is supported by the Superintendent and the Board of Education, and all bargaining agencies. This is the first time since 1965, at which time the "Amidon Plan" was judged illegal, that the school system has had an instructional direction. The Competency-Based Curriculum builds on the School Board's policy position in 1967 to Individualize Instruction. It further builds on many of the ideas from the Academic Achievement Program, in that it uses the concept of "targeted" instruction. The stresses relative to the curriculum are in the areas of reading, English, language arts, mathematics and science. Also, from the Academic Achievement Project, the role of tests in instruction has been continued. The Competency-based Curriculum makes use of both criterion referenced tests and norm referenced tests to improve instruction.

What things from the school system's past efforts have been built upon?

As already mentioned in the answer to Question #1, the Competency-Based Curriculum builds on many of the past efforts of the D.C. Public School System. Not only are there specific components in the areas of curricula, staff development and testing, the Competency-Based Curriculum direction has taken full benefit in terms of being sure that many of the plans for change which failed in the past would not have similar things happen to the Competency-Based Curriculum. That is why there has been careful involvement from the beginning of the Washington Teachers' Union, the Council of School Officers, regional personnel, parents and students. The wide acceptance of Competency-Based Curriculum is direct testimony that we have learned from the past.

How did CBC start in the District?

In October 1975 the Board of Education negotiated with the Acting Superintendent, Dr. Vincent E. Reed, an Agreement. This Agreement had as one of its chief directives that the Superintendent establish a Curriculum Advisory Committee which would come up with the comprehensive education program that would serve the needs of all of the students in the system, Pre-K through grade 12. The Curriculum Advisory Committee was assembled with appropriate Union representatives. The Committee's deliberations continued over the winter of school year 1975-76. The final results of the Curriculum Advisory Committee's work was presented to the Superintendent in April, 1976. It was entitled "A Design for a Competency-Based Curriculum, Pre-K through Grade 12." The presentation of this document to the Superintendent marks the beginning of the Competency-Based Curriculum direction in the D.C. Public School System.

What is the difference in "Competencies" and "Academic Achievement" as stressed in the Clark Plan?

"Competencies," as opposed to "achievements," pertain to the individual being able to demonstrate in life-related roles the application of skills which have resulted from schooling. The CBC is designed to prepare young people in the D.C. Public School System in five critical areas:

1. Analytical Skills
2. Consumer/Producer Skills
3. Communication Skills
4. Social and Political Skills
5. Self-actualization Skills

The development of these broad skills should prepare the student to function as a successful citizen in modern society.

How does CBC deal with the concerns of the Skelly-Wright Decision?

The Skelly-Wright Decision primarily concerned itself with the allocation of resources in an equal fashion to meet the needs of individual students in our school system. Inasmuch as the Competency-Based Curriculum is an individualized program, with full consideration being given to the individual needs of each student, it is fully compatible and consistent with the Skelly-Wright Decision.

What happened in terms of past efforts to improve instruction in the D.C. Schools?

A number of efforts since the demise of the "Amidon Plan" were not conceptually thought-out in terms of the unique circumstances which are presented by the D.C. Public Schools. Many of the plans did not have broad-based support from both school and community personnel. Many of the plans did not take into full consideration the socio-economic characteristics of the student population which the D.C. Public Schools served. Many of the plans were organizational-change plans as opposed to people-change plans. The Competency-Based Curriculum direction has attempted to take full advantage of those conditions which caused previous plans to fail.

What are the Six Critical Issues and how do they relate to CBC/CBE?

1. General goal statement for instruction to specific measurable and performance-oriented goals for instruction.

2. Mass or group instruction to individualized instruction focused on the student.

3. Graded organization of instruction to a pre-k through 12 continuum.

4. Grades based on artificial steps and general standards to criterion level certification of mastery.

5. Promotion based on a graded organization with grades based on artificial steps and general standards to continuous progress based on criterion level certification of mastery through demonstrated and measurable performance.

6. Graduation based on time spent in seat as certified by Carengie units to graduation based on demonstrated performance of certified minimum skills.

What is the role of the criterion-referenced tests in CBC? What role will standardized tests play in CBC?
Criterion-referenced tests are currently administered in the fall and spring. Questions have been raised regarding the feasibility of eliminating the fall criterion-referenced testing and using test data from the preceding spring for classroom management in the fall. The feasibility of eliminating fall criterion testing was investigated through a small pilot project conducted in the summer-fall of 1976. This involved, through contractual scoring arrangements, the reogranization of spring 1976 data so that each teacher in the project received individual pupil data for incoming students arranged in class summary form. These students were not tested in the fall. Reorganized spring data were used to begin the instructional program for students individually, in small groups, or in class groups.

Aside from the tremendous logistical problems that must be solved if this effort is extended to all schools, the plan is feasible. However, there are certain developmental aspects of CBC that prohibit implementing the plan at this time.

Beginning in school year 1978-79, system assessment points will be established at traditional grade levels three, six and nine. Consistent with CBC and also with the concept of a Pre-K through 12 continuum, these critical assessment points will provide for both an evaluation of the effectiveness of the curriculum and a method to improve instruction for the individual student.

A combination of norm-referenced and criterion-referenced tests will be used at these levels to flag weaknesses in the system and to diagnose and prescribe treatment of learning

deficits of individual students. Criterion-referenced tests will be administered in the fall and spring as in other years. The norm-referenced test will be administered to all 3rd, 6th and 9th graders in the spring of each school year. Group data will be analyzed by individual schools and regions. Specific corrective plans of a school and regional nature will be designed by those schools which show deficits in reading and math.

An analysis of individual student performance will be done for all students in grades 3, 6 and 9 who fall below the national norm in reading and math. Necessary adjustments in the level of PRT/PMT administered in the following fall will be made in order to secure a better diagnosis of the strengths and weaknesses of these students. These diagnostic assessments will be used to develop a prescription for instructional services for students below grade level for school year 1978-79. As a result, the system should show effectiveness of both curriculum impact on student skills as well as a utilization of teaching resources.

Articulation between norm-referenced and criterion-referenced tests will involve investigation of the relationship between clusters of skills on the norm-referenced tests and the skills measured on the Prescriptive Reading and Mathematics Tests. Results from norm-referenced and criterion-referenced tests from spring 1976, 1977 and 1978 will be used for this study. The ultimate aim is to be able to predict scores on the norm-referenced tests from criterion-referenced tests and/or eliminate fall criterion-referenced testing.

What is the system thinking relative to promotion and retention of students?

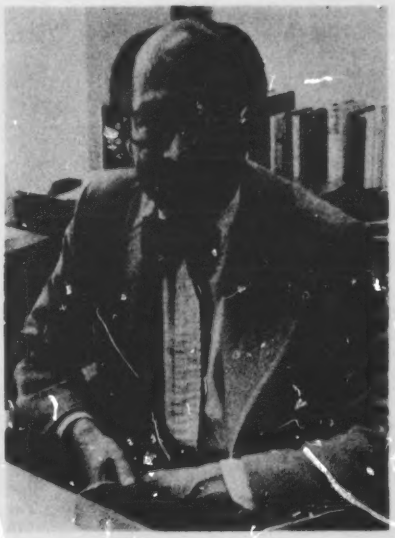
Promotion, what is a great event that comes in the spring of the year for 95% of the students in public schools in this country, is a wonderful thing; for parents and children alike!! For that 5% or 7% of the young people in the public schools of this country who get retained or detained; that represents failure. We know that research is very clear on the motivational value of failure. It is a negative motivating kind of event. People do not grow as a result of failure. Consequently, part of the promotion practices today are based on the fact that there is a graded system; a time-based curriculum (May or June, your time is up and you must

be judged!!!). This is an artificial process based on general standards. What we must be in a position to do is to bring to bear what is called continuous progress in our schools. That continuous progress must not be time based, coming once a year. A student must be able to be promoted, or progressed along the continuum at any given time in the instructional year, or month; or whatever. Also promotion must be based upon criterion levels of mastery and it must be done in terms of demonstrated and measured performance on the part of the student. Now this, the resolution of this particular issue, will be no small task. No small job because 98% of the practices in this country from elementary, junior high, all the way up to graduate school is based upon the fact that someone is going to get an "A", someone is going to get a "B", somebody is going to get a "C", and somebody is going to get a "D".

We have already said that one of the great promises of a Competency-Based Curriculum approach is that probably 95 or 96% of the students can master those skills or competencies that have been clearly delineated and put into the technology that we have talked about earlier. So, if 95% of the students can master the competencies, then that old curve, that old grading idea of the best of the group gets "A", the next best gets "B", the large average group gets "C", a few get the "D's" and one or two get the "F's", all of this is no longer relevant and it is going to take a great deal, not only programmatic manipulation and massaging, but the application of the computer; again, in terms of organizing and managing data to make decisions in terms of promotion and retention. It is going to take a whole lot of attitude changing on the part of parents and teachers. Many of these persons (teachers and parents) themselves found great glee as they passed up the educational ladder, grades one, two, three and on to grade twelve. And then many went another four years to get BS degrees and then another year or how every many it took for a Master's Degree and finally, for many of them if they persisted, the grand and glorious final accolade -- the Doctor's Degree!! Those moments were moments of celebration!! What we have got to do in the resolution of Critical Issue #5 is to find moments of celebration all along the way of the teaching and learning process so that learning itself becomes one great celebration. To do this, we must make promotion an integral part of instruction so that there can be even small moments which are celebrative. But we cannot wait once a year every year and make the hard decision: promotion or retention.

It must be a part of the day-to-day process of learning. Promotion must be like life itself: Seldom do we fail at things that tomorrow with a new and better day, offer hope that we can make a go of it. Why should schools be any different from life?

Instructional Support for CBC: Where the System is Now



Wilbur A. Millard
Associate Superintendent
Office of Educational Programs and Services

The Office of Educational Programs and Services is comprised of a complex of supportive disciplines and programs that fall under the organizational domains of the Divisions of Career Development, Adult and Continuing Education, Special Education, and Pupil Personnel Services.

First, let me establish a few considerations which are pertinent to the frame of reference in which we conceptualize the development of a competency-based curriculum for special needs clientele. The special needs I refer to are those inherent in students with specific vocational aspirations who attend our Career Centers, those of students with handicapping conditions in and among sensory, perceptual, cognitive, affective and motor areas, and those from the adult student population.

Our first consideration relates to the need to clarify the range and specifics of competency expectations as they relate to life space or life skills requirements, given the respective assets and disabilities of our special clientele. At this point we differentiate between competency and capa-

city and the programmatic and curricula implications that ensue from that differentiation. A capacity does not manifestly demonstrate competency, whether the capacity be stated in acquisition of knowledge, i.e., content terms or in behavioral, i.e., skill acquisition terms. A competency, to our way of thinking, is a complex of actualized capacities that relate to those life space requirements that enable the individual to live with reasonable contentment, to enhance the quality of his/her life, to be productively employed, and to relate to others in meaningful, affective ways. Curriculum goals then, must reflect beyond capacity.

One of the frequent problems of the learner, especially the young learner exposed to a capacity-based curriculum, is the inability to establish a relationship between the academic pursuits of the classroom and the life space requisites characteristic of our technological, socially complex and demanding society. The fall-out from this apparent cultural and educational discontinuity is motivational loss, disaffection, low achievement, behavioral acting-out, truancy and drop out. The curriculum then should emanate from the goals, aspirations and expectations of the life space and be organized into problem-solving experiences that relate specifically to these life functions--not to "school" functions. The "life skills" competency curriculum then will require that the organization of knowledge into "courses" or "skill sets" be recast across such arbitrary although seemingly "logical" lines, and reset into groupings of skills as are seen to be required by specific life-demand clusters as set forth by the community.

We in the Office of Educational Programs and Services seek to translate curriculum skill acquisition from a base of life space needs that reflect the demands of the society in which we do and will live. Nowhere is this need more apparent than in those adults who are trying to deal with the developmental hurdles of adult existence, than in those of our handicapped who despite developmental obstacles want to experience the full benefits of our culture, than in those students with clusters of vocational interests who seek productive careers in their chosen areas. Our first premise then is that the basis for curriculum development is to be found in the requirements, needs and approaches and aspirations of the life space. Consideration (2) comes to us from the interface of education and the behavioral sciences. It continues to be somewhat surprising that those of us who are on the cutting edge of the teaching-learning process fail

to incorporate the findings from human behavior and child and youth development into our approaches to institutional instruction. Neither do we require a basic understanding of the learning process, given the state of the art, from those who teach or those who supervise those who teach. Our work with the handicapped population makes it clear to us that a consideration of the ways people learn is essential to the planning of their learning experience and therefore to curriculum development.

A great deal of insight into "normative" functioning comes to us from our work with the extremes of learning disability. The fundamental question, "to what extent are schools brain-antagonistic", comes to us from the literature and research on human learning under the general heading of "proster theory". This theory holds that the brain groups "programs" for related purposes into structures or prosters that are arranged in layers.

The brain when understood as an effective pattern-detecting apparatus suggests a presentation of that which is to be learned in a different fashion than that from the perception of the brain as a simple stimulus-response device. Educators have attempted to make the curriculum "logical"; but the ordered, sequential and linear form of curriculum presentation is not the logic of the brain, although it may be the logic of the school. The brain is not a digital computer or an adding machine. It is in many respects, but not exclusively, an analogue computer that functions on probabilities. The brain then, searches its storage exclusively for what it needs to make sense of surrounding and existential reality. It is not likely to process what other brains think it ought to have unless there is some high probability that that which is offered contributes to the extraction of meaningful patterns from external confusion, the post-Sputnik school of learning notwithstanding. The discontinuity between the way people learn and the way the curriculum is presented, and the discontinuity between curriculum goals and life skill requirements must be breached. The brain was not designed exclusively for the school, and the institution of the school does not always appear to be designed to facilitate cognitive and affective development.

The implication of all of this for us is that the curriculum should present problem-solving opportunities and options that will allow the learner to create programs, rather than pre-

sent totally pre-packaged material that does not allow the brain to exercise its probabalistic requirements, compatible with its functioning apparatus. Curriculum materials should be so presented as to encourage creativity, provide opportunities for discovery and the resolution of problems in a life space context. We would not have gotten to the moon and back with a digital computer.

Consideration (3) is relative to the difficulties inherent in embedding a competency-based curriculum into a format that was organizationally and procedurally designed for a completely different set of circumstances. I refer here to incompatibilities among a competency-based approach and those structural obstacles that must be adjusted in order for there to be congruence between that which is proposed to be accomplished and the setting in which it is to be accomplished.

Where are we now? Nowhere is there a longer history of attempts at competency-based approaches than in adult education and career development. The antecedents of competency-based approaches with the handicapped comes to us from its rudimentary roots in the development of sheltered workshops for the trainable mentally retarded. Adults usually come to a learning center with a fairly definite goal in mind; the criterion for the achievement of that goal is also reasonably clear. One adult may come to learn to read. That adult may be quite satisfied if a newspaper/magazine article or income tax form can be comprehended sufficient for rudimentary adult performance in his/her life space as it exists or as it expands. Another adult usually understands his goal to a reasonable extent and may also be clear that the criterion for success is the ability to assemble a carburetor at curriculum layer I.

The picture is less clear in special education. Fortunately the evolution of programs for the handicapped from concern with maintenance and subsistence in segregated environments has achieved recent break-throughs under the insistence of parent advocates, the courts, and federal legislation. Nevertheless our society in general is not yet comfortable with realistic mainstreaming in education or in the market place despite non-discriminatory legislation. It is not always understood that the logistics of mainstreaming are identical with prescriptive-diagnostic approaches to accomplish a "least restrictive environment".

Planned and realistic mainstreaming places extra demands on the instructional staff. It requires not only curriculum development and coordination between special education and the regular program of instruction, but a sensitivity to and an understanding of the complex of developmental disabilities and issues of the mild, moderate and severely handicapped. The necessity for this adjustment becomes clear as we proceed to develop Individual Educational Prescriptions as required by P.L. 94-142 for all handicapped students. A prescription can be rendered and implemented only when there are those curricula supports that relate dignosed needs to learning experiences that meet those needs.

In this context, special education is a pioneer, suggesting that the approach to the individualization of instruction for all students, not only the handicapped, might be accomplished through a modification of our individual instructional prescriptive process. The competency-based curriculum then becomes the raw material that provides the selective data for incorporation into individual I.E.P.'s, such selection based on educational and other diagnostic findings.

In addition we perceive that the special education curriculum should contain a highly developed vocational skills component. It is particularly relevant to note that a life space variable in the lives of the handicapped relates to earning a living, given the constraints of specific disabilities. Even without specific disability we feel that vocational skills development needs to be both refined and broadened in a competency-based curriculum. The situation in the present market place makes it clear that a technologically-oriented economy renders those who do not have the skills to support the technology, economically expendable. The present intolerable level of youth and young adult employment is testimony to this fact. I do not mean that the school should have an exclusively technological orientation; schools are hopefully about enhancing the quality of life, given the technological circumstance.

Let me get to the specifics of competency-based curriculum development in our areas of concern: In Adult and Continuing Education our clientele insists that we relate to adult-oriented life goals. You have probably heard of the Adult Performance Level (APL) Study, a four year study by the Adult Education Division of the Office of Education. This study identified five areas for competency development: occupa-

tional knowledge, consumer economics, government and law, health, and community resources. In order for competencies to be developed in these areas the Study held that the adult must be able to use the general skills of reading, writing speaking and listening, computation, and problem-solving. From this base a study team arrived at (65) objectives that purport to determine a person's ability to deal effectively with the demands of everyday living.

The relationship of Adult Performance Level specifications to our competency-based curriculum development technology and support system is clear. The Division of Adult Education has undertaken the task of clarifying this relationship with staff and with the CBC team. It has become involved in providing graduate level courses at the University of the District of Columbia, in developing competency-based curriculum guides; one such guide being completed, disseminated and currently under evaluation. This particular activity permeates programs in Adult Basic Education, GED, the traditional Carnegie unit diploma, English as a second language, acculturation programs and related support systems. We are simultaneously brain-storming the feasibility of alternative internal and external approaches to high school certification. The external high school diploma route offers a very flexible answer to the problem of meeting adult literacy needs. Certification for that which has been learned through life experiences is the theme of external high school diploma approaches. In this instance the competency-based implications are clear.

We have the regular high school, the GED or equivalency diploma, the evening school approach, and now we seek the external diploma approach. Competency-based approaches must permeate each of these routes to certification. It is clear that the traditional GED approach must be re-examined to document the extent of congruence with the goals of the school system, adult performance level expectations, and our competency-based curriculum in its present stage of development.

In Special Education the situation is somewhat more complex. The degree to which the handicapped can be expected to function in major life space competency areas such as occupational knowledge, consumer economics, government and law, health and community resources is dependent upon the nature and degree of the disability and the compensatory mechanisms

that can be developed to minimize the impact of the handicap. The special students, i.e., the developmentally-delayed, the visually-impaired, the deaf/blind, the communication disordered, the orthopedically and/or health-impaired, the emotionally disturbed, the behaviorally problemed, the learning-disabled, have needs which extend beyond those currently being addressed in the competency-based curriculum in its present stage of development. In order to facilitate a learning process that will enable each child and youth to address his/her life's goals, it is imperative that a developmentally-sequenced curriculum address cognitive, sensory-motor, communicative, functional living and vocational skill development. These skill areas often require attention in the curriculum for the handicapped much before the student can attain the developmental readiness to engage the domains or skill categories of CBC as it presently stands. These skill expectancies must extend in most cases below the baseline of that expected for the majority of students for which CBC is being developed, and will require the development of a pre-skill curriculum as a foundation for subsequent learning. The work of Piaget, Bruner, Montessori and others helps us in approaching the problem of developmental readiness in this context.

Because education for the special student may be terminal at any point along the continuum, emphasis must be placed on the attainment of basic self-help skills. It is necessary therefore, to introduce these tasks at the earliest moment practicable to encourage independence and self-reliance, and to provide contiguous practical experiences in the prevocation and vocational areas and even to sustain these experiences over the longer period of time than is necessary for the child who is not handicapped.

In a developmental skills sequence model such as the one being used in the planning of the curriculum for the special student, the curriculum range must delineate sequences of skills that progress from custodial and trainable ability levels to adult competency. The readiness level must consist of opportunities for the mastery of prerequisite skills that facilitate the student's learning more advanced skills. Within this model, a teacher does not simply wait for a student to be ready to learn a skill, but teachers the prerequisite skills. We believe that developmental readiness can be facilitated, just as logically as learning to read. The instructional triad: the skill to be attained; the tasks, or experiences to be presented and the assessment,

allows for intervention into the component skills the student lacks and for which prerequisite skills have been mastered. A precise delineation of the current functional level of a student in specific skill areas is more feasible programmatically for developing prescriptive and instructional services than is the use of traditional diagnostic categories such as severely retarded, trainable, emotionally disturbed, blind, deaf, etc, although the Office of Education for the Handicapped, federal legislation and our funding requisites still mandate traditional labeling.

Any task, whether it is pointed toward developing the cognitive or analytical domain, the functional living or self-actualization, consumer or social domain may be reduced, modified or developed for instructional prescription via a specific modality for a given disability. Thus, you will not see a curriculum for the blind or for the deaf. What you will see is a set of curriculum management techniques for the various diabilities. The special education curriculum is a set of instructional triads consisting of sets of skills. The handicapping condition is not the sole criterion for prescriptive curriculum choices. Perhaps it is not the most important, although it sets certain reality limitations in the present state of the art.

Staff development activities in Special Education have involved over 600 regular and special education teachers in the use of a competency-based curriculum. In addition, each school in the city has access to a special education school-based teacher who is trained in diagnostic-prescriptive assessment and instruction. The Special Education staff is developing a training program which will enable an even greater number of teachers to apply this methodology to the newly-developed curriculum.

As a result of a requirement of P.L. 94-142, the Education for All Handicapped Children Act, special education teachers are developing and implementing individualized education programs for each handicapped student in the public, private and institutional sectors. The individual program requires the student's present levels of educational performance; goals for the school year, including short-term instructional objectives; specific special education and related services to be provided to the student; projected dates for initiation of services; anticipated duriation of the services; and, objective criteria and evaluation procedures and sched-

ules for determining, on at least an annual basis, whether the short-term instructional objectives are being achieved.

This procedure is simply an application of the basic CBC-identified process: outcome goals, instructional means and evaluation-assessment means. The individual education program and our diagnostic-prescriptive methodology ensure that these three (3) components are: explicit, known, agreed upon, allow choice, adaptive and reflect life role expectancies. In essence, the Division of Special Education is operating a CBC-CBE micro-system which is under continuous modification.

I would like to mention a fairly neglected but potentially powerful supportive discipline that we are trying to coordinate with because it offers a focal point for the reinforcement of and participation in the development of student competencies. I refer to parenting, nurturing and surrogateship.

This area is crucial to all educational programs, but especially to programs for the handicapped. The process of child development begins at home not at school. The first step of course is parent development, which is a special application of staff development.

A variety of training activities have occurred involving parents of handicapped children and youth. Activities include orientation in the areas of diagnosis, placement, laws and mandates that affect the handicapped and home reinforcement planning. Through workshops and specific courses parents have had training in these specific examples:

a. Major Provisions of P.L. 94-142
b. Diagnosis and Assessment Workshops
c. Training in the Use of Learning Language "At Home Kits"
d. Regional orientation sessions for parents on various aspects of special education programs
e. Special sessions on due process.

Parents are also involved in determining the use of federal allocations available for supplemental services and serve on committees responsible for developing and reviewing federal proposals. Opportunity is provided for parents' participation on the Advisory Panel for Special Education in-

cluding a sub-committee devoted specifically to "Parent Activities".

Another major effort is being planned involving training parents in skills for screening pre-school children utilizing Incentive Grant funding.

Future training efforts as determined through our needs assessment include:
Behavior Management
Mainstreaming (Least Restrictive Environment)
Gross and Fine Motor Skill Development
Family Services
Community Organization

Our program agenda indicates that there will be a presentation on counseling and Competency-Based Curriculum tomorrow as well as a position and status report on other pupil personnel disciplines (psychology, social work, attendance) and their supportive impact on the competency-based approach. Be sure to listen for clarification and details on our Attendance Awareness Program and on a modest but important guidance activity we call "Facilitators Program" that uses peer counseling techniques as a supportive alternative to the development of life space competencies is the need for specification in the area of affective functioning as it relates to inter-personal communications. All people communicate, not only congitively but with an embedded affective-attitudinal underlay or overlay as the case may be.

The major focus in the Career Centers of Career Development for SY 78 is the professional development of all school personnel and the development of curriculum competency criteria in specific occupational areas. In accordance with the established guidelines all principals in Career Centers established CBC building teams:

- CBC building teams attend staff development workshops and courses where they received instructions in CBC technology in order to develop and implement local schools CBC action plans.
- Presently, Career Development Centers are participating in the major tasks inherent in the action plans.
- Staff development activities have been implemented to encompass the development of instructional objectives

and learning heirarchies, and clarify techniques in classroom management to enable teachers to use CBC technology.

The Division of Research and Evaluation is assisting in our monitoring process. A consolidated report is compiled from data submitted to the Division of Career Development Programs and forwarded to the Office of Educational Programs and Services. Building action plans are being monitored to determine the extent to which tasks are being accomplished. The Office of Instruction has proceeded with preparation for curriculum validation in selected Pilot Schools providing:

- Orientation for administrators of Pilot Schools
- Orientation for staffs of Pilot Schools
- Development of semi-monthly curriculum validation seminars

Pilot Schools will validate new curricula in the priority areas of Mathematics, Science, English, Reading and Language Arts. The curricula validated by the Pilot Schools 1977-78 is used in the Prototype Schools. A curriculum development and review process is occurring in the following occupational areas:

Business and Office
Distributive Education
Industrial Arts
Health Occupations
Consumer Homemaking
Trade and Industrial Education

I would like to mention two of several Career Development programs that offer very promising alternatives which should be considered for expansion or replication. One is the experience-based program that approaches the development of competencies through a learning contract between student, community-based learning site sponsor, the student's learning coordinator. This is clearly a very individualized program that relates school learnings directly to real-life settings and responsibilities in preparation for future careers. These are non-paid experiences for the students.

Our Work Experience Career Development program uses a slightly different approach. It provides a paid experience for youth and young adults. This program exposes students to experiences on actual work sites in non-profit organizations that relate to competencies they are expected to achieve. At the same time, the program focuses on occupational awareness and the personal and educational requisites for full-time employment.

Finally, the process of monitoring, program modification and updating is occurring continuously in the Office of Educational Programs and Services, the basis for scrutiny and reassessment being the Office Action Plan for CBC.

This in brief is where we are. Much has been left out in point of time. I would like to summarize by outlining our notion of an operational plan for the achievement of competency-based education.

Step I - Community involvement in the development of our philosophy of education and the

Step II - Development of a configuration of life space skill functioning areas that reflect the philosophy of education

Step III - The determination of sets of competency-based skill complexes that have been determined to be essential to productive functioning under each of the life spaces areas, pre K-adult, Special Education and Careers.

Step IV - The development of criteria for competency at strategic intervals, such criteria to be public and embedded in the curriculum for each life skill area.

Step V - The development of assessment instrumentation that is directly related to competencies being taught pre K-12, Special and Adult Education and Career Development in each life skill area

Step VI - The development of a strategy for structural reorganization and procedural modification comparable with the approach above

Step VII - The development of alternative strategies for remediation based on the results of competency assessment

Step VIII - Reassessment and curriculum and test modifications as required.

I have probably done some violence to the tremendously creative efforts of staff in attempting to present so complex an undertaking in so short a time. I note that discussion periods with opportunities for questions and critiques are a part of the morning agenda and perhaps that exchange will promote those modifications that are always required when one moves to the frontiers of the science and the art of teaching and learning.

Instructional Support for CBC: Where the System is Now

P. Gary Freeman
Assistant Superintendent
Region VI

In preparation of Phase II of CBC, the assistant superintendents for the six regions cooperatively developed a CBC Action Plan which set the following as its major objective:

> To direct and supervise the implementation of the Competency-Based Curriculum on the regional level.

This plan served as a guide for subsequent plans which were developed by the regional staffs for the Educational Centers, for the utilization of Peer Assistance Teachers and supervisory personnel, and for plans developed by each school.

At the regional level a variety of activities were planned and implemented for staff development and instructional support based on assessed needs. Among these were CBC workshops, courses, mini-activities, demonstrations, direct classroom support, data collection and support for Pilot Schools, planning with grade levels and departments, and other related activities.

The Building CBC teams served as a close link with the regional teams in planning and facilitating the System's CBC thrust.

At the building level, staffs were involved in:

- Using the CBC technology in the classrooms;
- Giving students objectives for subject areas and daily activities;
- Establishing CBC resource rooms;
- Developing a functional, challenging building environment;
- Providing a positive climate for learning.

Monitoring on a regular basis by regional teams and self monitoring by schools have shown creative approaches to implementing CBC.

Among the major activities this year was the program of Parent CBC Seminars which served as a vehicle for facilitating parent and community understanding of the Competency-Based Curriculum in order to

- enhance the parents' ability to communicate with their children and with teachers about CBC, and
- help parents recognize the changes which will gradually take place in teaching and learning situations.

Educational Centers were developed in each region to serve as sites for professional development of teachers, administrators, and community. They also provide reference and instructional materials, teaching ideas, and other instructional support resources.

Special projects also offered support for CBC. Some of these include library-media centers, test taking skills, clinical supervision, reading in the content area, development of study and research skills, etc.

A new city-wide program involving each region this year was the Peer Assistance Teachers Program. Thirty teachers were selected to provide direct assistance to teachers in the classroom.

Another strength of this year's program has been the cooperative planning and sharing by the staffs of the CBC Center and the six regions in order to provide similarity of thrust and coordination of activities.

A major responsibility of the regions has been the dissemination of information. This has been accomplished via meetings with CBC team representatives, SCAC chairpersons, student representatives, PTA/Community representatives, administrative and other groups. Newsletters, bulletins, brochures, summary reports, etc. have also served this purpose.

Evidence indicates that schools have endeavored to achieve the objectives of Phase II of CBC in professional, creative ways in order that students might have a quality instructional program.

The Organizational Implications of a Competency-Based Approach

William G. Spady
National Institute of Education
Senior Research Consultant
Office of Instruction

Competency-Based Education (CBE) ranks as one of the most misused and misapplied concepts in American education today. During the past five years a major ground swell of policy action has emerged in over thirty states imposing some kind of "competency demonstration" as a condition for student promotion or graduation. In all but a few cases, what has come to be called CBE is no more than a testing and remediation program focused on basic literacy and mathematical skills. It misses the point in terms of the meaning and importance of Competency in life role activities, what it means to Base a program on competencies, and in what respects the term Education extends beyond the boundaries of student certification alone. In short, Competency-Based Education, if adequately understood and flexibly applied, could be an exciting and valuable concept,but in order to be so educators, policy makers, and the public will have to be willing to entertain some substantial departures from traditional educational assumptions and practices. The following offers a broader view of this concept and some of its important implications for school systems.

The Concept of Competency

As noted in an earlier paper (Spady, 1977), I share a viewpoint with many others who have worked with the CBE concept in institutions of higher education that competencies are ". . . indicators of successful performance in life-role activities." (p.10). Framed in a slightly different way, competencies involve the ability to create effective results in one's life. While there are small differences in the implications of these two definitions, their common elements are most important.

First, they suggest that the focus and context of competencies are real life and the various roles we occupy which require such a broad range of individual capabilities. To be competent in a life-role (such as bread-winner, consumer, mate, parent, or political citizen) is to create the quality of experience and success you seek in that role. This means that the curricula developed to facilitate competencies must take as their starting points an assessment of the demands and contingencies associated with major life roles, not the logic and substance of academic subjects. There are, for example, no life-roles called language arts, mathematics, or social studies.

Second, life-role success fundamentally requires coping with the ever changing realities of social conditions. The environments, resources, regulations, and individuals that are an integral part of modern day life are often troublesome and continually changing, thereby suggesting that one of the most essential attributes of a generally competent person will be adaptability in the face of difficult and shifting circumstances and demands.

Third, competencies are formed through the highly complex integration and application of many discrete capacities. These capacities represent the essential building blocks or foundation on which competencies rest. Some of these capacities are, of course, quite apparent and measurable; others are extremely subtle or even invisible to many people. The essential point, however, is that competency requires tapping this reservoir of individual capacities, integrating them in complex ways, and applying them based on the contingencies present in specific social contexts. Competency rarely involves the simple mechanical application of simple or manual capacities.

Fourth, this integration and application of capacities which underlies competency clearly reflects both the cognitive and manual skills directly supported in most school instruction and a broad repertory of affective capacities, which may, on balance, actually be the attributes that most facilitate life role success. That is, while knowledge, skills, and concepts are important components of success in all life roles, they do not ensure it. Successful role performance is at least equally facilitated by the attitudes, values, feelings, expectations, motivation, independence, cooperation, endurance, and intuition people possess. Affective capacities cannot be left implicit in a life-role oriented program as they now are in so many schools. In many life situations these affective capacities may be both "the medium" and an essential component of "the message" itself.

Fifth, competencies ultimately require role performance, nor just the acquisition of skills or knowledge of appropriate methods. They are, in other words, reflections of both what one is and what one can do. Competency oriented programs should, therefore, develop assessment tools that focus on the more qualitative aspects of performance as well as the more concrete demonstrations of cognitive and manual skill tapped by conventional measurement devices.

When taken together these implications represent a major departure from the typical capacity-building orientations of most school programs. Social reality and enlightened projections about life in the twenty-first century become our guides to conceptions of life-roles, competencies, curricula, appropriate instructional settings and agents, and assessment tools. The role of segmented school subjects taught in the generally sheltered environment of school buildings will have to be altered substantially if we choose to foster and assess competency outcomes. Capacities must indeed be developed if competencies are to emerge, but the methods, contexts, and timing of their development could alter significantly if life-roles were made a more central vehicle in curriculum and instruction.

The issues on which all of this is focused are the transferability of school learning to life and the extent of the school's responsibilities for fostering the moral and technical socialization of youngsters. Although debates have raged over these two related problems for decades some of the general domains of agreement will be explored in the following section.

The "Bases" of School Operations

School systems, like all formal organizations, must contend with two competing sets of forces: those focused on system productivity and those which stress maintenance and preservation of the organization. In general, the productivity sub-system of an organization requires adaptability, flexibility, and responsiveness to changing demands and technologies, whereas the maintenance system is concerned with ordering, routinizing, and stabilizing activities and procedures. The challange to administrators is to manage and support both systems without impairing the impact and effectiveness of either. Given the inherent differences between them this is an extremely challenging task.

When we examine the actual organization and operations of schools more closely, we find elements of these two competing sub-systems imbedded in classrooms as well as administrative offices. To a large extent these elements reflect two major bases of organizing school functions and activities: one is time and the other is outcomes (or results). CBE implies a major shift from time as the primary "base" of operations to outcomes (or competencies) as that base, and from vague-referenced standards of accomplishment to more specific criterion-referenced ones.

At present, schooling is time based. Major procedures, operations, decisions, and opportunities for both staff and students are dictated by the clock, the schedule, and the calendar. Fixed periods of time such as class periods, grading periods, semesters, and school years impose arbitrary constraints on the ways in which we organize instruction and when and how often we evaluate and certify student performance. In the time based system as we know it, time is fixed, students are usually given single opportunities to "pass," and the standards used are usually personal, subjective, variable, and vague. Grades represent a vague and unknown mixture of achievement, ability, motivation, deportment, attendance, "attitude," contextual, and background factors. The high school diploma is merely a certificate of attendance and an indicator of the student's willingness to "satisfy" the particular minimal expectations and standards of a series of teachers. Society's expectations for the year by year social promotion of students has reinforced the fixed-time basis of schooling, even though we know that the achievement differences among our high school graduates are enormous (and their general standards of social and technical competency are quite disappointing). A time based

system stresses roles rather than goals, emphasizes maintenance rather than productivity, and encourages orientations concerning "having things run smoothly" and "getting through the day" rather than "creating results."

An outcome based approach to schooling--which is what CBE represents--would reverse the relationships between time and standards. Goals and objectives take on new importance as they are made more explicit, defined in terms of the actual competencies and capacities students will develop and demonstrate, and made the basis of operations and decisions regarding student assessment and movement through the instructional program. In such a system schooling will no longer be determined by time; instead time is used in more flexible ways, and multiple opportunities for instruction and assessment are provided. This means that much more small-group and individualized instruction is needed to foster student mastery of given outcome goals. In addition, courses, credit, report cards and standards will be defined on a criterion referenced basis so that actual levels of skill are known. "Promotion" is not from grade to grade with a total cohort of students at a fixed or final point in time, but a continuous movement through an instructional program. Courses will be units of content representing levels of mastery, not units of time.

To use the term "Competency Based" to describe a major approach to education is, then, to treat the framing and attainment of outcomes as the primary base of school operations. But only a nodding acquaintance with the politics and sociology of schools is sufficient to suggest that there is considerable diversity and disagreement among both educators and segments of the public regarding which outcomes should be given priority in school programs. It is doubtful, therefore, that if schools actually wished to become outcome based that a sufficient consensus could be obtained in most places regarding the particular outcomes around which they could really organize.

According to Mitchell and Spady (1978) who discuss these competing alternatives in some detail, there are four broad themes which characterize the expectations of educators and the public regarding the contributions schools should make to the development and socialization of youngsters capable of entering and participating in a society that is orderly, productive, and attractive to its members. These themes

include: 1) nurturing in students a sense of Social Responsibility regarding the consequences of their actions for the welfare of others and the society as a whole; 2) generating and supporting Social Integration among individuals from varying social and cultural groups through direct interaction and participation in collective activities; 3) stimulating and fostering the fullest possible Development and expression of the individual's physical, affective, and mental capacities; and 4) promoting and certifying the achievement of necessary and important Technical Competencies. Each theme has had a major place in the historical evolution of American education, and each has its visible and vocal contemporary advocates as well.

What is particularly germane to this analysis is that each theme represents an alternative conception of what constitutes "real competency" for individuals, each has the potential for becoming the dominant outcome base for a given school or school system, and each represents an agenda to which every teacher and administrator must be sensitive, irrespective of the pressures imposed by the others. Attention given to one theme often means overlooking others. Consequently, with staff attention divided in four directions at once, it if often true that none of the outcomes desired in each domain is fully realized. The result is both potential and real staff vulnerability for failing to meet either someone's or everybody's expectations.

It is also important to note that there are major philosophical differences among the advocates of each major theme which further contributes to policy and operational strain in school systems. For example, to some social responsibility means developing loyalty and respect for social institutions and adjusting one's moral and legal conduct to prevailing rules and norms. For others it means showing sensitivity to others and being willing to serve and support those in need. Similarly, to some social integration means learning appropriate social roles, fostering a sense of belonging, and appreciating and participating in existing social structures and groups. To others it means exercising leadership and initiative in promoting group cohesion and purpose, or establishing close and significant ties to other individuals or cultural groups.

There are also differences among the advocates of personal development. Some would concentrate on intellectual and

physical development, others on affective capacities. Within each group some would stress "trainable and proven" capacities, others would advocate "discovering" emergent capacities and promoting creative expression. Similarly, some advocates of technical competency are primarily concerned with basic language and mathematical proficiency; others with a broader range of technical skills. Among each of these some stress the utility and minimum standards of competencies, while others seek high standards of excellence and innovative performance capabilities.

Given the tremendous range of qualitative and quantative differences sought by various groups in terms of school outcomes, it is not all that surprising to find most state "CBE" policy initiatives reflecting a "lowest common denominator/ basic skill" orientation to required student outcomes. The major exceptions, such as Maryland, Oregon, and Pennsylvania, have emerged largely as the result of strong State Board of Education/State Department of Education leadership rather than legislative mandate. Yet it is these nearly three dozen other "testing bills" that have substantially turned an educational effectiveness issue into a potential accountability nightmare.

Implementing Competency-Based "Education"

To many of its advocates the imposition of new performance requirements for high school graduation is an attempt to re-establish "the credibility of the high school diploma." Now that over ninety per cent of an age cohort stays in school a full twelve years and "social promotion" within an age-graded system is accepted policy, we have a sizable proportion of "graduates" today who would have not finished school in previous eras. To some, a distressing proportion of them are conspicuously deficient in basic literacy skills as well as in more advanced aspects of development and achievement.

What lies at the heart of this dilemma is not the diploma or social promotion per se, it is the system of Teacher Referenced Standards that we use along with time as the basis for establishing grades and Carnegie Units of "credit." As noted earlier, the combination of individual subjective judgement, very mixed criteria, and floating standards leads us to a labelling and credit system that is best described as vague-referenced. That is, the letter of numerical grades dispensed by teachers convey far more symbolic value than actual content. Twelve years of vague referenced symbols provide one with a transcript and diploma but not neces-

sarily a good education.

The paradox of all of this, of course, is that employers and college admissions officers, the very people who need to make selection decisions about graduates based on what they know, can do, and are like, are generally staunch opponents of abandoning the Carnegie Unit credit system even though it contributes to the problem of applicants with only paper qualifications. They are "getting stuck" with the very evaluation-certification system they continue to perpetuate by using time and letter grades as the primary criteria for graduation.

There are, of course, alternative approaches to setting and defining standards that could be considered, two of which could be made criterion referenced rather than vague referenced. They are Curriculum Referenced and Societal Referenced Standards.

Curriculum referenced standards would apply to the acquisition of specific kinds and levels of subject matter mastery. The content and criteria of the standards would be based on the logic and content of the subject and would be set by experts in each respective field. We could expect the outcomes in such a system primarily to reflect cognitive and psychomotor capacities.

Societal referenced standards would, by contrast,reflect the judgements of a broader array of citizens regarding the competencies needed to facilitate success in life roles. In this case the social, political, and economic demands of life would constitute the frame of reference for both curriculum building and standard setting. Mastery of individual capacities could be included among the array of competency standards selected.

The third major alternative, Norm Referenced Standards, has, of course, been the popular choice of nearly every state that has chosen to implement a standardized testing program. Depending on how measurement is actually done and reported, the advantages of norm referenced testing may be little better than teacher referenced. In this system standards are fundamentally comparative and peer based, and performance in many different knowledge and skill areas is usually

reduced into a single numerical score. While you may know that a student scored at the"eighth grade level" in reading, you may still not know what the student can and cannot read nor what his particular strengths and deficiencies may be.

The use of norm referenced testing to create an accountability system for students will not solve the problems of educational effectiveness that lie within the instructional system itself. The basic orientation of accountability approaches is to use some reliable form of student performance data as the basis for making judgements and decisions about either students or staff. This often means reward, placement, or promotion decisions. While remediation for "substandard" performers may be required, that remediation generally consists of providing these students with the content and approaches that have not worked for them in the first place. Nearly every example of current state "CBE" policies either declares or presumes that the existing time-based, age-graded structure of schooling shall remain unchanged.

If the problem were more appropriately seen as an effectiveness issue, then two more complex, but ostensibly more valuable, activities would have to be undertaken. The first is examining and improving the nature of and interrelationship between two major factors that affect instructional effectiveness. One is the bearing which school structures, i.e., the organizing principles for school activity, have on the techniques, procedures, mechanics, and content that affect student involvement, learning, and performance. The other has to do with the quality and character of expectations and social process that characterize the interaction between staff and students. These factors lie at the heart of school effectiveness and cannot be ignored.

The second activity that needs to be undertaken in order to impact on school effectiveness is to create a CLOSE ARTICULATION between student assessment and instruction. This means continual diagnosis, monitoring feedback, and correction of student progress based on regular contact, NOT the once a year or once every three years administration of "the big standardized test" which, in actuality, may not correspond very closely with the curriculum the students have been pursuing. It is really not clear what we expect such tests to tell us about actual levels of student achievement that the teachers who interact with them on a daily basis should

not already know. If this information is missing, it is due to the inadequacies of the classroom assessment system, and that is what needs to be strengthened. If it is available but not used effectively to improve student learning, the fault may lie in our typical use of classroom assessment to manage and control students rather than to manage and improve instruction.

Therefore, aside from monitoring the system and its programs, it is not clear that such tests provide important information about students (other than a grade-level score) that teachers do not or should not already know. Yet in most states where such testing programs have been installed, it is the students who are penalized for program weaknesses by having promotion or diplomas withheld.

In a genuine competency based program the danger of poor articulation between assessment and instruction would be averted. CBE is built around the close integration of three essential components: 1) outcome goals, 2) instructional experiences that directly reflect those goals, and 3) assessment devices that represent the operational definition of the goal itself. To build maximum flexibility and responsiveness into such a program, ALL THREE need to be explicit (i.e., criterion referenced and clear), known (that is, public and visible - without secrets and surprises), agreed upon by all those with a direct interest in the student's progress, allow choice (i.e., be framed and developed with several equivalent alternatives to choose from), and adaptive. Being adaptive means to use student performance data as the basis for modifying and improving four major things: 1) the student's subsequent performance, 3) the assessment tools used to measure goal attainment, and 4) the content and sequencing of goals and curricula.

Since there are obvious dangers of such a goals-means educational approach becoming inflexible and mechanistic, care must be taken to create as many choices and as much flexibility as possible. There are, as Spady and Mitchell (1977) point out, two distinctly different conceptions of how a goal based (or outcome based) approach such as this might work. One is to prescribe and delimit at the outset both the goals to be pursued and the role opportunities available to students. This has been characterized as the "whips and chains" approach to schooling. The other is to expand

both the goal and role choices available, particularly when outcomes are defined in competency terms and engagement in realistic life-role pursuits is desirable. In a goal based program the important and determining principle of operation is reaching the goal. The means, locale, resources, agents, time, and number of opportunities given for reaching it are open to far greater choice than in a role dominated program in which time and means are often taken more seriously than the outcomes attained.

From this perspective CBE can be fundamentally geared to improving student opportunities in several ways: 1) by dealing with time and opportunities for meeting goals more flexibly and realistically, 2) by articulating goals, and the purposes of instruction clearly and openly, 3) by giving a specific content refernet to assessment, evaluation, certification, and promotion, and 4) by bringing school work closer to the real factors affecting success and fulfillment in life.

What it does in the process is impact on the entire range of accepted school structures and practices including: the structure and use of goals and objectives; the meaning and bases of standards and credit; the definition, organization, and delivery of the curriculum; the criteria and methods of student evaluation, record keeping and reporting systems; student grouping and promotion practices; the criteria and timing of "graduation;" methods of student supervision and control; role expectations and relationships between staff and students; and staff interdependence and cooperation.

In a phase, CBE means a continuous progress approach to instruction and certification for all students; and, as a California school administrator recently remarked, "It makes perfect sense from an educational standpoint, but we'll all be afraid to try it. Instead, we'll keep giving kids standardized tests and ask teachers to grade tougher all twelve years." CBE does, indeed, ask both educators and the public to give up decades of habits and assumptions regarding the structures and methods of schooling, just at the time when accountability looks cheaper and safer than another version of school reform. The "CBE testing movement" has reached bandwagon proportions in just a few years, but CBE in practice may become this century's major non-event in public education.

REFERENCES

Mitchell, Douglas E. and William G. Spady (1978). "Organizational Contexts for Implementing Outcome Based Education." Educational Researcher. vol. 7, no. 7, July, 1978. In press.

Spady, William G. (1977). "Competency-Based Education: A Bandwagon in Search of a Definition." Educational Researcher. January, 1977. pp. 9-14.

Spady, William G. and Douglas E. Mitchell (1977). "Competency-Based Education: Organizational Issues and Implications." Educational Researcher. vol. 6, no. 2 February, 1977. pp/ 9-15.

The Federal Commitment to Student Achievement

Mary F. Berry
Assistant Secretary
Department of Health, Education and Welfare

I want to thank Superintendent Reed for inviting me here today, and for giving me this chance to talk about education here in Washington and in urban America as a whole.

All of you know that the relationship between the Federal Government and the District is a special one; and it involves special obligations. Two centuries of underrepresentation have been their toll on the District, and there is no point in our ignoring that fact. Several generations of inadequate resources and insufficient attention have brought the District schools to their present condition -- and dispite some recent improvements that the Superintendent and his associates have managed to bring about there is no point in ignoring <u>that</u> fact either.

My main purpose in coming here today is to assure you that, at least as far as the Federal Government is concerned, change is coming. You may be underrepresented in the Congress, but in this Administration, on education issues, you will not be unheard.

This is not a time for glittering promises that we know cannot be kept. I would like to tell you that by next year the Federal Government plans to make the District's schools the model for the nation -- but you know as well as I do that that is not a very likely prospect. I would like to tell you that by next June, thanks to Federal assistance, all the students in the District will be reading at or above grade level -- but the fact is that even with a massive infusion of Federal funds, that result would be beyond our capability. We accomplish nothing if we attempt nothing -- but we accomplish less than nothing if we proclaim goals that we will not achieve. I will make no long-term promises today; all I will promise is that here in the District and in all the cities of the nation we will make a concerted effort to solve the problems of urban education. I believe -- and I think any objective person would agree -- that we have made a good start and that we are moving in the right direction.

In some ways Washington, D.C., is like most big American cities -- only more so. In fact, it may have been a generation ahead of its time. The problems here are not unique; they are representative of problems that will arise and are arising across the nation. Bad schools don't come into being when the environments around them decay and die. We see the process of decay in cities in the East, the Midwest, and parts of the South -- and we have to arrest that process or our long-term efforts to save education are doomed.

The figures tell part of the story, but only part. Thousands of manufacturing jobs are going from the cities to the suburbs, or from the Northern and Eastern cities to the Sun Belt areas in the South and West. People in cities used to make more money than people in the surrounding communities; by 1973, here and elsewhere, they made an average of 6% less. Cities used to offer a good mix of people from various ethnic backgrounds; by the 1970's white flight was making true integration difficult in some places and impossible in others. City schools are supposed to reflect, in the composition of their student bodies, the society at large -- but 15 of the 20 largest cities, in this 85% white country, had public school enrollments more than 50% minority by 1974, up from 10 in 1968. In the District, that figure is now about 95% -- and given the political resistance to cross-country pupil transportation, that percentage makes racial integration an unlikely goal in the short run.

Big city public schools are not just segregated racially; there is an economic separation that is setting in as well, and becoming a dominant factor in urban life. We know that as well as you do. To a dangerous extent, those blacks and other minority group members who can afford to are giving up on public education and sending their children to private schools. The students left behind -- the ones Superintendent Reed and his associates deal with -- aren't just disproportionately minority; they are disproportionately poor, disproportionately from one-parent families, disproportionately malnourished, and disproportionately life in sustandard housing.

This explains -- to those who are willing to listen -- why school costs are going up in big cities even where enrollment is going down. It costs more to educate poor children than rich ones, and the sooner our society can accept that simple proposition the better off we will be.

And it explains, in part, why big city students lag behind the national averages on almost every standardized test of achievement -- why seventy percent of the 5th grade students in urban public schools, for example, are reading below grade level. Tests are not perfect; I am aware, as you are aware, that some examinations may have cultural biases and other defects. But we cannot and should not use that fact to explain away the fact that city children, and especially disadvantaged city children, grow up with an educational handicap that will be a burden to them all their lives.

We understand those statistics at HEW, and we understand the fact that there are people behind the numbers. We know that here, as elsewhere, money alone won't solve any problems -- but that without adequate resources, there can be no hope. That understanding provides the basis of our urban education policy.

I want to discuss with you the fundamental element of what we propose to the Congress -- and what the ultimate impact will be here in the District. I want to enlist your support -- but I also want to invite your suggestions for how we can strengthen further a program we think is already strong.

When we came into office last year, the Title I budget was about two and a quarter billion dollars; this city's share of that was less than $14 million. We believed that we had a moral obligation to make a greater effort than that in compensatory education; we saw the studies that showed Title I programs actually made a difference where they were well-run and where they represented a sustained commitment. We increased the budget by almost half a billion dollars -- and the District's share went up by 20%.

This year we called for another increase in the Basic Title I outlay -- and a new provision, a $400 million concentration of resources on districts like Washington, with large numbers of students from low-income families. We don't know how that proposal will fare on Capitol Hill -- but we do know that if it passes, as we hope it will, it would bring the total Title I allotment to this city to $20 million. That money will allow the kind of compensatory effort that can do more than bring children up to grade level; it can give them the tools they need to excel.

But, as I said, money alone only makes achievement possible; it provides no guarantee that schools here or anywhere else will succeed. The only way we can assure that our schools serve the needs of all our children is to foster and encourage extensive community involvement in the education process. I'm sure Superintendent Reed will agree that we need more than auxiliary-type PTA's or parent advisory councils - and we need more than annual parents' nights in schools. We need people from the city, parents and nonparents alike, in the schools, with the children, on a regular and frequent basis.

I know how valuable that kind of involvement can be, because I have seen it right here in Washington. I know the potential for involvement exists in other cities, and that it remains to be tapped. I believe that we can use our resources, at the Federal level and at the District level, to bring parents and others into the education process. That means providing support services like transportation and day care; it means special efforts to involve non-English speaking parents. And it means technical assistance programs so that lay members of the community know what education, and especially compensatory education, is all about.

We need to involve parents in the education process in the home also — helping their children master the basics, encouraging them to study, and making a desire for education the central concern to every child's life. We can give parents the tools to do this -- the workbooks and the training — but the desire to do it has to originate with them. This is what Jesse Jackson has been saying -- and it is encouraging but not surprising that he has struck such a responsive chord.

The massive public support for a sound, effective, well-directed program in basic skills instruction is something that is positive, constructive, and appropriate. We want to respond -- and we want to sustain the demands for quality that lie at the heart of that support.

President Carter set the priority goal for all of us. The purpose of our national policy, he said, is to furnish "every child...with the basic educational skills needed for further learning and a productive life." This approach we are recommending to the Congress includes grants to stimulate parents' involvement, money to help districts use tests to effectively measure and improve basic skill achievement, and incentive to states to develop comprehensive programs. The focus is not on national efforts, but on locally-based programs, run by people who know what their communities need.

We can provide some funds; the real leadership will have to come from people like yourselves. You have to keep the basic skills crusade at the top of this city's agenda -- and you will have to do more than that. You have a fight, not just for an adequate school system, but an excellent one -- a system where grounding in the basics represents the starting poing, not the finish line.

What Washington needs is what every American city needs: A school system that takes young people and gives them the skills and the capabilities to be functionally competent adults -- competent to earn a living, to contribute to their community, to get satisfaction from the arts, to understand science and history. To settle for anything less is to cheat our children and to shortchange our own future.

There are problems in this city; they will not be solved overnight. The Federal Government can help, and will help to the fullest possible extent. But we can accomplish nothing unless all of you help as well.

Competency-Based Curriculum
Competency-Based Education:
The State of the Art

James H. Block
Associate Professor of Education
University of California at Santa Barbara

Recent issues of the Educational Researcher contained two papers on Competency Based Education (CBE) by Spady (1977) and Spady and Mitchell (1977). These papers discussed at length what it may mean, operationally speaking, for an educational system to be based on the development of particular competencies in all learners. But they only touched on the kinds of competencies upon which a system might be based. In short, they developed the "BE" portion of CBE but not the "C".

The purpose of this paper is to focus on the "C" in CBE. To be specific, the paper will propose one possible conception of the competent school leader, discuss some of its features and highlight some of its implications for researchers.

A Conception of Competence

The conception of competence proposed here derives primarily from the work of White (1959) and of Inkeles (1966, 1968). From White, the conception borrows two ideas. The first idea is that human beings have a biological predisposition

to be productive rather than reactive to their environment. In other words, we innately make certain demands of our environment. Competence reflects our capacity to effect these demands. The second idea is that competence has two aspects. One concerns motor and intellectual mastery of our environment. If we are competent, then not only can we manipulate our environment, we also acquire certain feelings of "self-efficacy" or "self-confidence" in the bargain.

From Inkeles, the conception also borrows two ideas. The first idea is that just as human beings make demands on our environment, so does our environment make demands on us. In particular, competence reflects our capacity to interact effectively in three kinds of environments, each of which is defined by particular adult roles: ". . . those which one's society will normally assign one, those in the repertoire of one's social system that one may reasonably aspire to, and those which one might reasonably invent or elaborate for oneself " (Inkeles, 1966). In otherwords, competence reflects our capacity to interact effectively in certain socially ascribed environments and also in certain self-selected and self-developed environments. The second idea is that we require a particular set of psychomotor, cognitive, and affective skills for competent interaction in each of these various environments. In other words, we must possess particular motor, intellectual and emotional competencies to handle the various intra, inter, and/or extra-personal demands that each environment presents.

Combining these four ideas, we arrive at the psycho-social concept of competent students shown in Figure 1.[1] Competent students are those who can and want to interact effectively with the three kinds of environments posed by the socially-ascribed, self-selected, and self-developed roles they face upon graduation from high school. Such students possess the particular competencies required to master each of these environments in motor/intellectual terms and in emotional terms.

Some Features

This conception of competence has several features that make it especially useful from a CBE perspective.

Philosophical. One feature is philosophical. The conception derives from work that seems to share some of CBE advocates' major convictions. Smith (1968), for example, has described

the work of Inkeles (1966) as being ". . . congruent with the emerging public interest in finding ways in which all citizens may become equipped for effective participation in modern society, with the public distress that a submerged minority have been trained in incompetence that leaves them unable to benefit from most 'opportunities' that are open to them" (p.274). Parallels between this description and Spady and Mitchell's (1977) description of one of the major convictions of CBE advocates are evident: ". . . the capabilities of too many high school graduates are inadequate to meet the requirements of life in modern societies" (p.10).

Conceptual. Three other features are conceptual. First, although the conception does not indicate what particular competencies we should think about, it does suggest a scheme for how we might think about them. Prior experience suggests that such schemes are often lacking in CBE discussions, even discussions at the highest levels of our educational policy-making machinery.

Recently, for example, I reviewed a set of papers commissioned by the National Institute of Education and addressed to identifying salient adult life roles in American society. The hope of NIE sponsors was that a consideration of these roles at the national level might highlight the kinds of competencies for which our schools might teach on the local level and therein NIE could play a leading role in formulating public educational policy. But only a few of the papers focussed on the issue of how we should think about the life-roles from the outset and gave the reader relatively little idea as to how and why this particular set of roles was selected from the range of possibilities available.[2] In the absence of this information I found myself being forced to accept their lists on faith and personal prejudices. I suspect that the NIE policy-makers were in a similar position.

Second, the conception presses one to think in "both/and," rather than in "either/or" terms. It reminds one that students must master skills that foster both their social and self development; students cannot be asked to master just those basic skills (e.g., the 3 R's) that will make them only better sociophiles. Moreover, it reminds one that students must master these social skills in affective as well as in psycho-motor and cognitive terms. We need to ensure that they motorically/intellectually "can" undertake the subsequent demands of their adult life and that they emo-

tionally "want" to undertake these demands. The former provides student response-ability for new learning; the latter, student responsibility.

This "both/and" quality of the conception seems especially important in light of much literature on competence (e.g., Clausen, 1968; Coleman, 1974; School Review, 83, 1974). This literature repeatedly suggest that social- and self-initiation/motor intellectual competencies and emotional competencies lie at the core of being adults. Adults are constantly forced to cope motorically, intellectually and affectively with new environments foisted upon them by external social forces (e.g., pollution, over population, poverty) and by internal psychological forces (e.g., choices, conflict, discontentment). Yet, to date, much of the discussion on CBE has overlooked this fact. CBE has exhibited a distinct bias toward preparing students to function effectively in only those new environments which it now seems society will routinely thrust upon the individual and to meet these environments in only motor and intellectual terms. We hear calls from CBE advocates to prepare students to be, for example, better workers, better citizens, better consumers--calls which stress a return to the 3 R's. We hear few calls to prepare students to be better users of leisure, better individuals, better non-consumers--calls which stress an advance to such skills as empathy, awareness and relaxation. The conception of competency put forward here could help redress this social/motor-intellectual bias.

Third, the conception explicitly recognized the future and the inherently time-linked nature of education. It recognizes that from the time students enter our school system until they leave, 12 to 16 years will transpire. Consequently, the conception reminds one that those competencies which are necessary for adulthood today may be unnecessary tomorrow. This presses CBE advocates to anticipate the world of adult life, i.e., the world of tomorrow, as we go about making our school plans for today. We cannot, like the proverbial ostrich, stick our heads in the sand and hope the future will go away; we must constantly plan for the transfer of school learning to adult life.

Piper (1977) has made the same point somewhat differently. He writes that effective functioning in a contemporary society requires coping: *" . . . with changes, both predicted and unpredicted that may take place during the individual's lifetime. This implies both an education for the present--that is,*

for the routine, the existent--and an education for change--that is, for the unknown, the unpredictable. In other words, our formulation must provide for both an education for insight and an education for foresight . . .
Piper continues: *It has become almost a cliche to emphasize change, and the increasing pace of change, as the central and challenging feature of our time, and there has been no shortage of commentators ready and willing to document the point. What we have been less ready and willing to consider, however, are the implications of this phenomenon for our traditional approaches to education.* (p. 21)

Practical. The final feature is practical. The conception makes an important ends-mean linkage between the notions of learning for competence and learning for mastery. As both Schalock (1976) and Spady and Mitchell (1977) have noted, mastery learning ideas should lie at the heart of the CBE reform effort. Indeed, Spady and Mitchell (1977) have even gone so far as to suggest that these notions must so lie if CBE is to realize its fullest promise. Yet, as noted elsewhere (Block, 1977), mastery learning ideas and strategies do not lie at the heart of most CBE efforts across the country, despite the fact that mastery ideas and strategies seem to have worked well (see Block and Burns, 1977).

This conception of the competent student re-emphasizes the linkage between learning for mastery and learning for competence. It suggests that students must learn for mastery if they are to become competent. The conception also encourages that mastery learning ideas and strategies are use broadly and humanely. It admonishes mastery learning advocates that their ideas and strategies cannot be limited to the acquisition of only simple intellectual and motor skills nor can they be implemented in a mechanistic fashion that would sacrifice student feelings about what they were learning.

Some Implications

Those CBE advocates who find congenial these features of the conception will also find that the conception poses some interesting research problems. Four of these problems seem especially noteworthy.

(1) Accumulation. One obvious problem is the accumulation of various conceptions of what it means to be an adult. This conception points to the need to identify those socially ascribed, self-selected, and self-created adult roles that

students might conceivably play upon graduation, and the various competencies each adult role might demand.

One way to accumulate such conceptions, of course, might be to survey, interview and/or to observe those who have stake in the student outcomes of the schooling process. If one conceives of these stakeholders as being roughly equivalent to the student's socialization community, then the work of Lippitt (1968) indicates that these stake holders would be agents of

(1) the formal education system, public and private.

(2) the churches with their programs for children and youths.

(3) the leisure-time agencies with their recreation, cultural and character education programs.

(4) the social control and protection agencies such as the police, courts, traffic-safety agents, etc.

(5) the therapeutic, special correction,and resocialization services such as counselors, remedical clinics and programs for the handicapped.

(6) employment officers and work supervisors who hire the young and supervise them on paid jobs.

(7) political leaders who have an interest in involving the young in political activities such as civil rights protests.

(8) the sub-culture of parents.

(9) the sub-culture of like-age and older peers.

And . . . agents who control and distribute the socialization interventions of the mass media . . . (p. 335). We would add an eleventh agent to this list, namely the student him or herself.

The problem with this approach, however, is that it presumes that relevant data regarding various conceptions of what it means to be an adult do not exist and hence that fresh data need to be generated. This presumption is not totally warranted. So, a second way to accumulate such conceptions of adulthood might be to synthesize the extant research.

One source would be the empirical and theoretical literature on adult socialization, especially that literature that has attempted to synthesize some of the general societal demands faced by adults. The work of Inkeles and his associates would be a useful illustration from the sociological tradition; the work of Sheehy from the psychological tradition. Inkeles and Smith (1974), for example, have identified through cross-cultural work some of the core characteristics of the "modern" adult, while Sheehy (1977) has delineated some of the core requirements of adult development.

A second source would be the literature on cultural coping (e.g., Taft, 1976). Some critics assert that the world of the student has become divorced from the world of the adult, that the school harbors a "student culture" antithetical to "adult culture" (see, e.g., Coleman, 1974). If these critics are even partially correct, graduation from school and entry into post-school world ought to create some element of cultural shock. The literature on cultural coping suggest particular roles and competencies required to successfully negotiate such shock. Conceivably these roles and competencies could either help individuals to fit within the existing social order or to carve their own niche.

(2) Evaluation. A second obvious problem would be how to help CBE practitioners evaluate the various conceptions of adulthood that are accumulated. One aspect of this problem would be how to prepare a defense for each conception that would command the practitioner's serious attention. Note we say "defense," not "proof," following Schwab's (1969) suggestion that proof is probably impossible in "practical" matters involving issues of curriculum. The other aspect of the problem would then be how to help practitioners make explicit value-choices among various defensible alternatives suggested.

Here is a place that the burgeoning ideas and techniques of the field of evaluation and,especially, curriculum evaluation could be of particular use. By and large, most practitioners in the schools, whether they be CBE advocates or not, have tended to encounter only one side of the field of evaluation. This is the side that tells them how well they have achieved the goals they set out to achieve. Less frequently practitioners encounter the side that helps them wrestle with the question of whether the goals were worth achieving in the first place. Were evaluators to tackle the problem of helping CBE practitioners to understand and to sort various conceptions of adulthood, they would have a ready-made field

upon which to display, to polish, and to develop their goal-clarification wares.

(3) Translation. A third problem is the translation of those adult-roles and competencies prized by CBE practitioners into student terms. The task would seem to entail the identification of three kinds of characteristics.

First, one would have to identify certain "school competencies." These competencies would mirror in the school situation the kinds of competencies that the student would actually need as an adult in his/her various roles. Spady (1977) defines them as ". . . indicators of successful performance in life-role activities . . ." (p. 10). Second, one would have to develop what Spady calls the "capacities for each school competency." These are ". . . the discrete cognitive, manual and social skills (such as reading and computational skills, speaking ability and motivation) that, when integrated and adopted to particular social contexts serve as enablers or building blocks on which competencies ultimately depend." (p.10). Lastly, one would have to determine what Spady calls the "enrichers" for each "school competency." These are ". . . affective capacities (such as sensitivity, awareness, and the appreciation of beauty) which may serve as valuable enrichers of experience in roles . . ." (p.10).

In practice, these characteristics could be identified in a variety of ways. Perhaps the most useful procedure, however, may be task analysis (see Resnick, 1976), though this procedure seems never to have been applied in the affective realm and would have to be modified accordingly.

Essentially, task analysis is a logical and iterative procedure in which one continually argues backwards from a given learner characteristic to determine its underlying sub-characteristics. In the case of a particular adult competency, say A, one would begin by asking the questions: In order to attain characteristic A, "What must the student be able to do, think and/or feel?" and "With what subject matter." And these questions would be repeated over and over as characteristic A is decomposed into each of its component sub-characteristics.

The net result of one's task analysis should be a learning hierarchy-like structure (see Gagné, 1968) for each adult

competency, i.e., an arrangement of psychomotor, cognitive and affective sub-characteristics that each student would presumably need to attain the competency. The sub-characteristics in each hierarchy would be arranged according to a possible sequence in which each sub-characteristic might be taught. Presumably sub-characteristics denoting certain school competencies would be superordinate to their respective subordinate sub-characteristics denoting particular capacities and enrichers. That is, school-competencies would occupy the higher rungs of the hierarchy while capacities and enrichers occupied the lower rungs.

(4) Execution. A final problem would be the provision of particular instructional strategies that could ensure that virtually all students do in fact acquire the enrichers, capacities and school competencies that they are supposed to master. This is the problem of developing some effective "mastery learning" strategies.

Such strategies already exist that can foster student development in the cognitive and psychomotor realm (see, e.g., Block and Burns, 1977). These strategies would have to be refined and extended. The biggest problem, however, would be the creation and development of mastery strategies that can foster student growth in the affective realm. No systematic strategies seem to exist, though the literature in humanistic psychology, affective education, and psychotherapy seems ripe with piecemeal ideas.

Conclusion

This paper has put forth one conception of the competent student, discussed some of its features, and highlighted a few research possibilities. This conception views competent students as those who can and want to master the various socially-ascribed and self-prescribed roles they will play upon graduation from school.

Obviously, this is only one of many possible conceptions of the competent student. The point is, however, that it is a conception and such conceptions seem sorely absent. Surely the educational research and development community has a responsibility to help rectify this situation.

A CONCEPT OF COMPETENCE

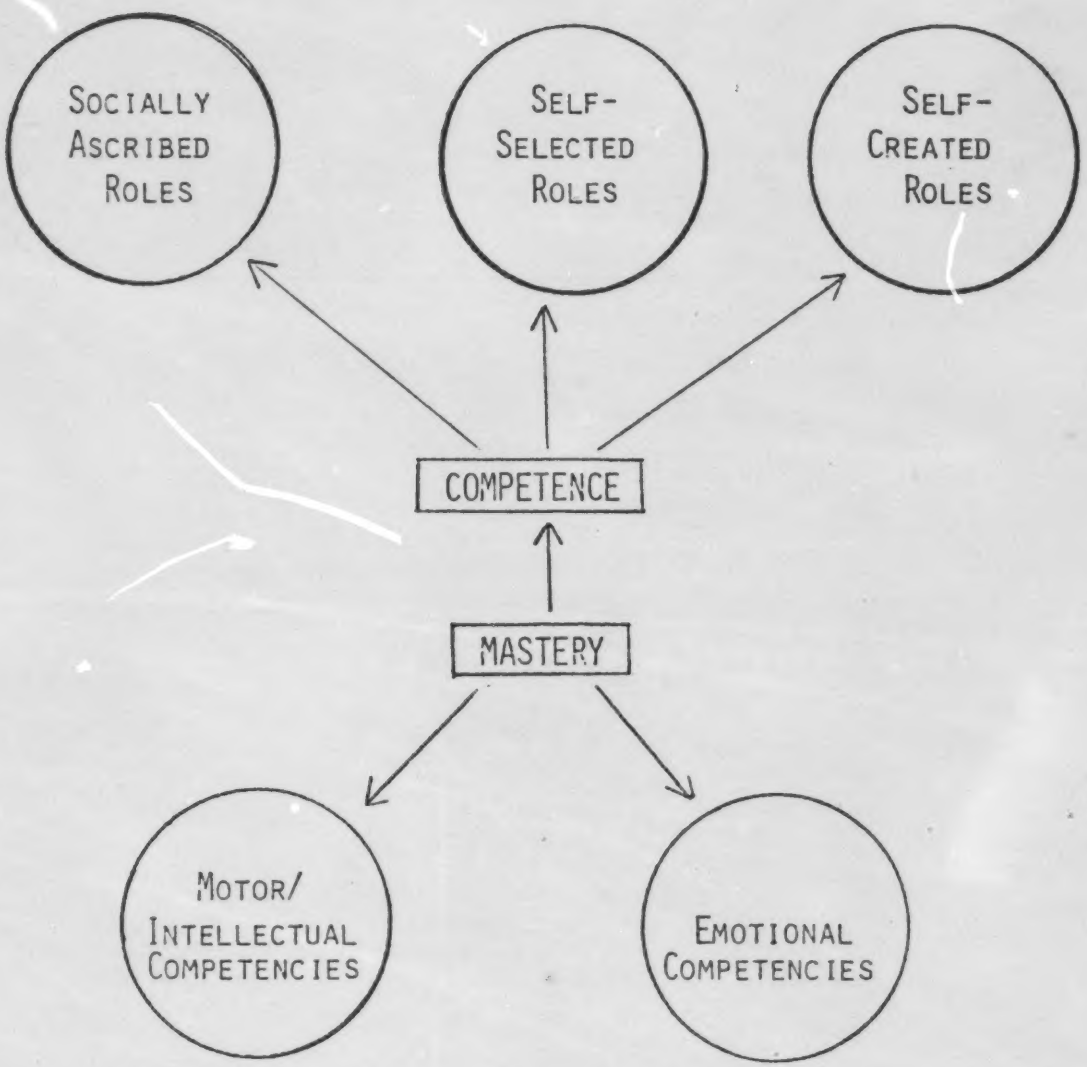


FIGURE 1

CBC, Validation, Monitoring and Evaluation

Herman Cobb
Director
Validation Study

To embark upon developing a new Competency-Based Curriculum for any large school system is, to say the least, a major undertaking.

However, this is what has happened in the District of Columbia Public Schools. During the past two years I have observed my superiors and my peers tackle the many difficult tasks that are inherent in establishing a CBC curriculum for the school system. These many tasks have been met with enthusiasm, with courage, and with determination. Although there have been frustrations and sleepless nights, there have also have been total commitment, the development of CBC experts within our school system.

Validation is only one of the many aspects in the curriculum development process. Through validation we are investigating the process and seeking to demonstrate the worth of the materials that have been developed.

In the Language Arts/English and Science validation effort, the Division of Research and Evaluation has placed the greater emphasis on demonstrating the worth of the materials. We have set forth the following aims toward that end:

1. To confirm the quality of the CBC materials
2. To test whether the materials can withstand criticism
3. To test whether the materials measure up to expectations
4. To provide proof of soundness and quality
5. To provide proof that the materials are effective with children.

The CBC materials as defined here are a collection of Instructional Triads in each subject matter area. By "Instructional Triad" we mean: one Behavioral Objective, two Instructional Activities, and three Assessment Tasks. This collection of Instructional Triads, ranging from simple to complex in difficulty, form a Learning Hierarchy.

With the above definitions and aims established, the Division of Research and Evaluation working with the Office of Instruction, the CBC Coordinating Team, the Curriculum Writers, Pupil Appraisal, the Division of Automated Information Services, and consultants developed a CBC Validation Model. The first task called for in the model was that of defining the problem, the second was to develop strategies. Other tasks specified in the CBC Validation Model were:

1. To identify resources
2. To match resources and tasks
3. To establish timelines
4. To design instrumentation
5. To develop a sampling martrix
6. To identify participants
7. To review the materials
8. To prepare supplemental materials
9. To provide orientation
10. To disseminate materials
11. To conduct staff development
12. To activate the study
13. To observe classrooms
14. To collect data
15. To process data

16. To provide feedback
17. To maintain quality control
18. To interpret the data
19. To modify the materials
20. To design a continuing validation plan.

After completing the model a strategy chart was developed. The chart listed the tasks, responsibility for each task, and the schedule for completing each task. A firm was designed to monitor task completion.

The Sampling Martrix

Twenty-nine pilot schools were chosen as validating schools by the Office of Instruction. For Language Arts and Science materials' validation, one teacher was chosen for each of the subject areas at each grade level one through six for a total of twelve teachers in each of twelve elementary schools. This provided a total of 72 teachers validating Language Arts and 72 teachers validating Science.

Two teachers were chosen to validate Science at the seventh grade level in each of nine junior high schools for a total of 18 teachers. Two teachers where chosen to validate English in the seventh grade, two in the eighth grade, and two in the ninth grade in each of the nine junior high schools for a total of 54 teachers. It was assumed that on the average each teacher would be working with at least ten students who were able to master the entry level objective for their grade. Thus, our student sample for validation would be over 2,000.

The Pre-Field Test

During the pre-field test period the materials were examined by the curriculum review teams prior to dissemination. The materials were checked:

1. To assure that the behavioral objective was written correctly in that it stated WHO was to perform, WHAT was to be performed, the CONDITIONS under which performance was to take place, and the CRITERION for success

2. To assure that there were two instructional activities providing alternative approaches to learning

3. To assure that there were three assessment tasks each calling for behaviors to be exhibited that were stated in the behavioral objective

4. To assure that the criteria for acceptable performance was clearly stated in each assessment task and that the criteria was consistent with that stated in the behavioral objectives

5. To assure that the reading difficulty level was compatible for grades indicated

6. To assure that the difficulty level of the tasks was compatible for grades indicated

7. To insure that there was an entry level objective, enabling objectives, and a terminal objective for each hierarchy.

Data Collection

Three data collection instruments were constructed to collect data once the materials were distributed to the field:

1. The Observation Form was designed to be used by the principal or designee to observe each validating teacher at least four times throughout the validation period to verify the employment of the CBC method and the CBC materials in the classroom

2. Another field instrument was titled, "The Student Participation Form." On this form teachers recorded individual student progress on the two Instructional Activities and the three Assessment Tasks by objective

3. The third field test form was entitled "The Teacher Feedback Form" and gave the teacher the opportunity to (1) rate each Instructional Triad as to the amount of time required for planning, preparation and administration, (2) rate the effect the triad had on the success of the students, and (3) rate the effect on students' interest, students' attitudes toward instruction, and the teachers' attitude toward instruction.

Teachers were also given the opportunity to explain or describe additional materials used and to make suggestions of materials to be used in teaching the instructional triad.

Data from the field is presently being collected. As it is collected it is edited and each objective is coded.

Working closely with the Division of Automated Information Services, a complex system of data processing and data analysis through computer programming has been developed. Data input will be analyzed by the Division of Research and Evaluation and the report and findings will be generated by the end of the current school year.

CBC, Validation, Monitoring and Evaluation

Marilyn T. Brown
Assistant for CBC Monitoring

I. Monitoring Objectives
   A. Develop CBC Monitoring Plan for School System
   B. Establish CBC Monitoring Team
   C. Coordinate CBC School System Activities

II. Areas Monitored by the Team
   A. CBC Acting Plans for Six Major Offices
   B. CBC in 29 Pilot Schools

III. Six Major Offices Reviewed for CBC Responsibilities
   A. Office of the Superintendent
   B. Office of the Regional Assistant Superintendents
   C. Office of Educational Programs and Services
   D. Office of State Administration
   E. Office of Management Services
   F. Office of Instruction

IV. Development of CBC Monitoring Plan for School System from Six Major Offices Action Plans
   Exhibit 1 - CBC Monitoring Plan for Regional Offices

Note: Explanation of the CBC Monitoring Plan for 1977-78 may be located in Comprehensive Education Plan of the D.C. School System, pages 167-171.

V. Monitoring of the Six Major Offices Action Plans
- A. Reminders to Office Heads on CBC Tasks
- B. Implementing CBC Monitoring Monthly Forum
  Exhibit 2 - Description - "Monitoring Forum"
- C. Monitoring "Off Plan" Critical Task
  Exhibit 3 - Description - "Exception Monitoring Report"
- D. Providing of Status Report to Office of Superintendent on CBC School System Activities
  Exhibit 4 - Report of CBC Monitoring Activities from July, 1977 - January, 1978

VI. Monitoring the 29 CBC Pilot Schools
- A. Rationale and Description of Data Files on CBC Pilot Schools
  1. Exhibit 5 - Detailed Staffing Chart for Pilot Elementary Schools
  2. Exhibit 6 - Detailed Staffing Chart for Pilot Secondary Schools, Skill Centers and Special Education School
  3. Exhibit 7 - Special Characteristics Chart for CBC Pilot Schools (e.g., Teacher Appraisal, Title I, Evaluation System, etc.)
- B. On-Site Observations at 29 CBC Pilot Schools
  1. Structured Observation Schedules - Specific Teachers, Time, Content Area and Grade Levels Listed for Monitoring Team
     Exhibit 8 - Schedule from Open Space Facility
     Exhibit 9 - Schedule from Traditional Facility
     Exhibit 10 - Schedule from Open Space and Traditional Facility
  2. Flexible Observation Schedules - Selection of Teachers Implementing CBC Made by Monitoring Team
     Exhibit 11 - Flexible Schedule from School With All Teachers Implementing CBC
  3. Rationale for and Use of CBC Observation Form
     Exhibit 12 - CBC Curriculum Validation Observation Form
- C. Presentation of CBC Lesson Observed by Monitoring Team
  Exhibit 13 - Elementary Level - Language Arts - "Writing Skills"

Exhibit 14 - Secondary Level - Science - "Science and Superstition"

D. Statistics on On-Site Visitations

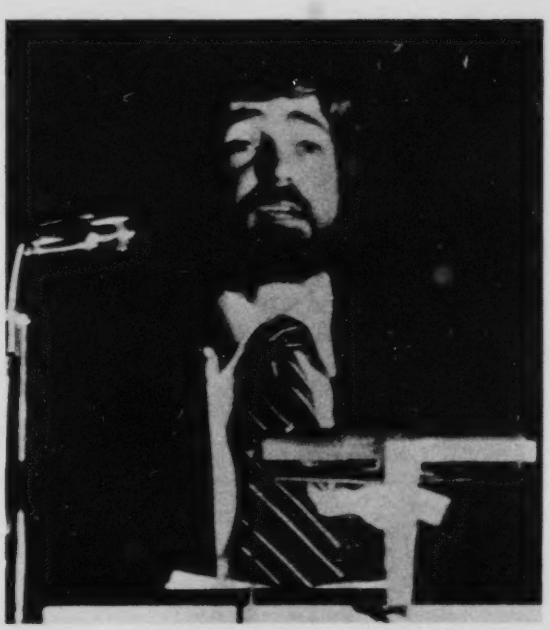
1.	Elementary Level	Language Arts	41
		Science	35
2.	Secondary Level	English	22
		Science	12
3.	Total Observations		110

VII. Summarization of Data

A. Analyzing Data

B. Report to Superintendent by June 30, 1978.

CBC, Validation, Monitoring and Evaluation



Frank Snyder
CTB/McGraw-Hill

It is a pleasure to speak before this group to give you an update on the work currently being performed by CTB/McGraw-Hill for the D.C. Public Schools and the process which leads to that cooperative effort.

CTB has been actively involved with the D.C. Public Schools since the conception and construction of the first system-wide criterion-referenced tests in reading and mathematics, the Prescriptive Mathematics Test and the Prescriptive Reading Test (PMT/PRT). The PMT and PRT construction efforts were unique in at least two respects; they were the first comprehensive criterion-referenced tests implemented system-wide in reading and mathematics, and they were designed to articulate with the curriculum of the D.C. Public Schools. Since the first construction efforts on PMT/PRT, CTB has continued to work closely with the D.C. Public Schools to provide materials and scoring services for the continuation of these testing programs. The existence of the present criterion-referenced testing program places D.C. in a very good position to effectively bring together all the resources necessary to effect the major curriculum reforms represented by the CBC effort.

Some time back, during the initial phases of the CBC effort, Dr. Guines involved CTB in a planning process to determine if and how CTB could use its expertise in test construction and evaluation to facilitate the efforts of the CBC group to effect curriculum reform. As a result of that planning process, Dr. Guines posed three challenges for CTB:

- Revise and reformat PMT/PRT to reflect the new curricular emphasis being developed by CBC while, at the same time, not disrupting the flow of information currently available from the testing program.

- Perform both formative and summative evaluations of the CBC-produced materials in reading and mathematics, the two content areas covered by PMT and PRT.

- Develop data linkages between the revised PMT/PRT and the Comprehensive Test of Basic Skills as a way of deriving achievement expectations and preferred instructional sequencing.

All of these tasks are currently underway:

- Both the Prescriptive Mathematics Test and the Prescriptive Reading Test are in the process of being heavily revised. The research versions of these instruments will be 80% new and revised items for Levels A-D and 60% new and revised items for Levels E-J. Objectives dealing with sets and numbers, properties of number, and other bases have been eliminated. In all, approximately 100 objectives will be eliminated in the revised editions. Both metric and customary measures for linear, mass, and volume will be included in the revised editions. Problem-solving objectives will be incorporated with numeration strands. Approximately 40 objectives will be releveled to bring them into agreement with the new curriculum, and, finally, some 60 objectives will be modified for improved fit with the CBC-developed curriculum.

  For the PRT, about 30 objectives will be deleted, another 10 releveled to bring them into agreement with the new curriculum, and a final 20 objectives modified for improved fit. Finally, approximately half the items will be revised.

  This process of extensive revision could not have taken place without some rather extraordinary efforts on the

part of Joan Brown, Nell Lewis, and Dorothy Stephens serving as members of the CBC coordinating team. Their efforts to insure good articulation between the CBC curriculum and the revised instruments have been extremely productive, and we look forward to a continuing mutually beneficial interaction.

- The first formative evaluation study is also moving along nicely. The model being employed uses much of the same teacher judgment data discussed by other speakers today and, in addition, references these teacher judgments to actual test-retest data available from those objectives in PMT/PRT which match the objectives of the materials under investigation. The formative evaluation study will collect four basic types of data: (1) a continuous monitoring log of materials usage by students and teachers associated with the target objectives; (2) PMT/PRT test-retest data for matched objectives; (3) teacher judgments on the characteristics and utility of the materials under study; and (4) outside expert review of the materials. CTB will be feeding back the last two types of data directly to the CBC coordinating team. After appropriate statistical analysis, the first two sets of data will also be transmitted to the team. Using the four data sets should enable the coordinating team to effect any further curricular revision that may be called for.

  Planning for a subsequent formative evaluation and the final summative evaluation of the materials is also underway and thus far does not present any substantial difficulties.

- The final task is one which is proving particularly exciting. Although CTB had done some preliminary research work linking criterion-referenced tests with norm-referenced tests, to be asked by a school district to directly link PMT/PRT with CTBS, through data, as a way of ultimately establishing predictions of performance to be used, in conjunction with actual achievement data, to evaluate programs and establish expectations of student performance, was certainly a novel idea, but one which I feel will be widely emulated by others around the country.

  The D.C. Public Schools are unique in this regard in that the structure of its testing program lends itself to the

construction of a data base that will allow the construction of these predictive systems. Beyond the obvious benefits that such an expectancy-setting system will have for program evaluation and the monitoring of individual student progress, some benefits have already accrued from this effort. As a first step in the construction of the predictive system, many contingency analyses were done between PMT/PRT and CTBS; these analyses greatly facilitated the efforts of the coordinating team and ourselves to refine the objective structures and the leveling of the objectives in the revised curriculum and tests.

- One further point and then I'll end my remarks. The efforts currently being expended to revise the curriculum so that it will become more effective, to revise the testing instruments so they articulate closely with the revised curriculum, and the attempt to develop an expectancy system based on achievement hold great promise for the furtherance of education. If these activities are carried out with vigor and the necessary coordination, we may well be on the verge of being able to relate the expenditure of educational resources associated to objectives and sequences of objectives, and finally to ultimate achievement measures; we may, in fact, be able to fine tune the educational process so that the goal of maximizing student potential can be realized.

CBC, Validation, Monitoring and Evaluation

Mildred P. Cooper
Assistant Superintendent
Division of Research and Evaluation

I. A Perspective on Evaluation

CBC (Competency-Based Curriculum) is a comprehensive program with many elements and activities. Evaluation of such a diversified program could take many forms. While evaluation is often thought simply to be determining whether objectives have been met, in reality it is a more complex process, especially if it is to yield useful information in timely fashion for decision-making. As with the program itself, evaluation is an activity that requires choices to be made, resources to be invested, and times and tasks to be specified and carried out. A model of the evaluation domain as described by Dr. Robert E. Stake will help illustrate these points (see Figure 1).

In Stake's model it may be seen that evaluation can be concerned with many relationships among antecedents (inputs), transactions (processes), and outcomes. Questions can be raised about the logical relationships (theories, rationales) among elements, about the degree of congruence between what was expected and what actually occurred, and

about the empirical or causal relationships between actual inputs, transactions, and outcomes. To answer any such questions, data are needed. One thing is clear: Priorities must be set for evaluation. More questions can be asked than can be answered with the limits of reasonable time and resources.

II. Areas of Concentration

The Division of Research and Evaluation has selected six aspects of the CBC program on which to concentrate evaluation activities:

1. Student progress and achievement
2. Validation and revision of instructional triads in Language Arts/English, Science, Reading, and Mathematics
3. Staff development
4. Curriculum development and implementation
5. CBC support systems (monitoring, management, supply, etc.)
6. Policy considerations.

There is currently evaluation work on-going in most of these areas on a limited basis. For example, Mr. Cobb has described the validation studies now being conducted by the Division of Research and Evaluation and Dr. Snyder has explained those done by CTB/McGraw Hill. The validation studies are, of course, limited this year to the pilot schools in the program. Dr. Brown has described the monitoring process. Also, the Division of Research and Evaluation evaluated last summer the CBC staff development and curriculum writers' workshops. As the CBC program increases with respect to the scope of curriculum involved and the number of schools and teachers utilizing it, the evaluation questions and methods will be reviewed and modified to accommodate to such developmental changes.

III. Strategy

Our basic strategy, with respect to each of the six areas listed, is essentially to concentrate on congruences between what is intended or planned and what is observed (what is actually done) and on empirical contingencies, to refer back to Stake's model. To carry out this strategy, it will be necessary to:

1. Determine the objectives, plans, and schedules of the responsible components of the program (to establish intended antecedents, transactions, and outcomes);

2. Identify measures of the intended antecedents, transactions, and outcomes;

3. Develop research designs for measuring, recording or observing actual antecedents, transactions, and outcomes;

4. Gather and analyze data concerning congruences and empirical relationships, feedback observations, and findings to the CBC program.

It is important to note that by focusing attention on the relationships between what was intended and what actually happens, we will be able to understand and explain the observed empirical contingencies between antecedents, transactions, and outcomes (inputs, processes, and outputs, if you prefer) to a much greater extent than if congruences were not considered.

It is clear from this strategy for evaluation of the CBC program why a detailed timetable and plan cannot be presented at this time. Since the evaluation approach is geared to determination of goals, activities, and timetables of the program as they are specified, detailed plans and timelines can only be developed as the program develops.

IV. Methods

Many of the data-gathering methods that will be needed are already in existence. Procedures for pre-field trials and field trials of new instructional triads can follow those currently used. The Evaluation System provides a mechanism for evaluating the progress and achievement of students.

Classroom monitoring can be done on a sampling basis as the program expands, using procedures employed this year. The program monitoring system presently employed can be expanded to pick up more extensive data about staff development, curriculum development, and support systems.

It will be necessary to expand the use of interviews and surveys, particularly where it is important to obtain information on transactions. Expansions of the CBC implementation from pilot and prototype schools to schools throughout the system will almost certainly make sampling approaches a necessity.

V. Conclusions

Evaluation of CBC must be regarded as a developmental process as the CBC program develops in scope. The validation studies going on this year can be viewed as pieces of evaluation, but evaluation includes more than validation.

The basic strategy of evaluation in six major program areas is to ask: What was intended or expected? What actually was done or happened? What were the results? The aims of the strategy are to provide data for decision-making that is diagnostic as well as conclusive.

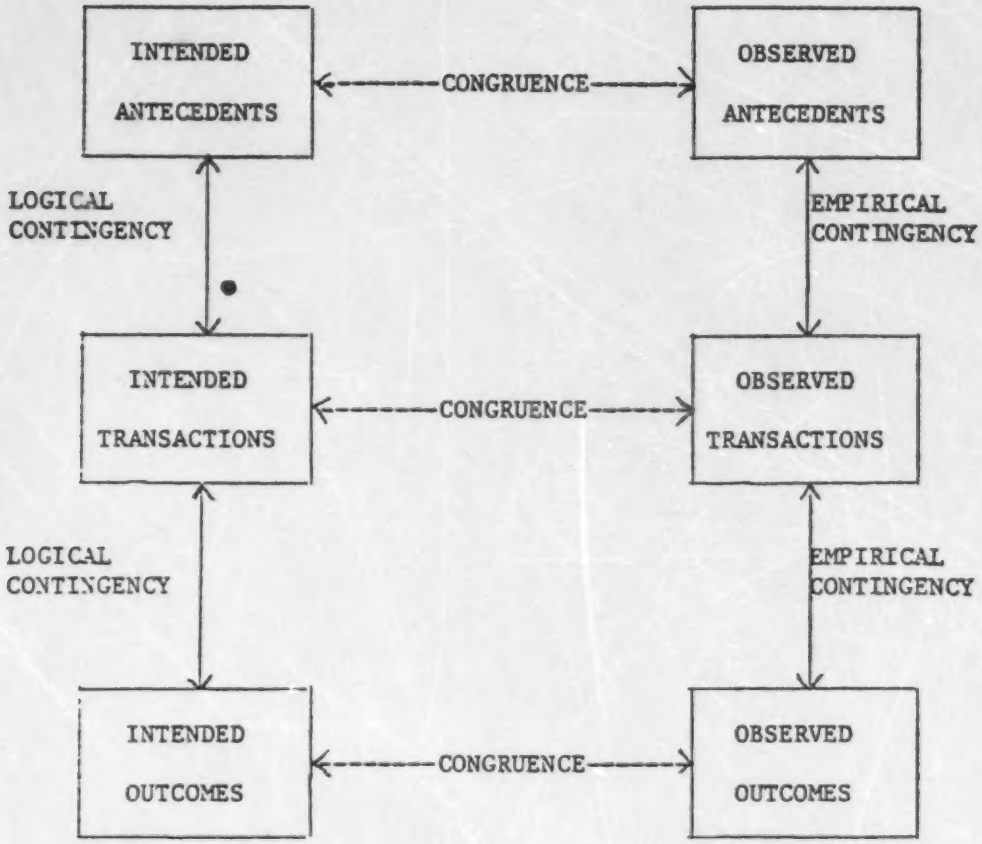


Figure 1. Relationships in Program Evaluation. (From Robert E. Stake, The countenance of educational evaluation. Teachers College Record (68) 1967, 523-540.

Student Assessment and the Competency-Based Curriculum

Robert B. Farr
Director
Pupil Appraisal

The present city-wide testing program has two components -- a criterion-referenced program and a norm-referenced program.

The norm-referenced program includes achievement testing at grades 3, 6 and 9, aptitude testing at grade 8, skills testing at grade 10 and readiness testing at Kindergarten.

The criterion-referenced program consists of the Prescriptive Reading and Mathematics Tests, Washington, D.C. Editions, at grades 1-9.

This presentation will emphasize the criterion-referenced program because of its emphasis on skill (objectives) mastery and its applicability to the CBC thrust.

The current testing program has its roots in the testing program of 1969 at which time the System adopted the Compre-

hensive Tests of Basic Skills (CTBS). This adoption was made because of the process/content classification system of the CTBS and because, for the first time in test history, large city norms were made available (in addition to the usual national norms). The publishing of large city norms represented responsiveness of the test publishing industry to the expressed needs of large city school system.

The Clark Plan, adopted by the Board of Education in 1970, stated that standardized tests in reading and mathematics should be administered at least three times a year, in grades 1 through 9, and that the tests currently in use should be continued for at least the next three years to serve as a basis for measuring the effectiveness of the Plan.

The Clark Plan, from an historical perspective, moved us into criterion-referenced testing. Opposition to the required three-times a year testing lead into such avenues as the questioning of the relevance of standardized achievement tests for students in large urban school districts. The obvious answer to this question was criterion-referenced testing whereby the emphasis would be placed on the student's mastery of that which he was taught based on curriculum objectives rather than on a comparison of the student's performance with that of some norm or outside standard.

The above example serves to illustrate the fact that a viable testing program must be responsive to the needs of school and community personnel. Again, it also illustrates the fact that test publishers must be, and have become, increasingly responsive to the needs of school systems.

Our criterion-referenced program continues to emphasize skill mastery and provides reports of the levels of mastery by objectives for each student, for the school, the regions and for all students city-wide, grades 1-9, by grade and by test level.

All testing programs provide an additional report of individual pupil scores in the form of a Home Report to parents which invites parents to contact school personnel for additional information.

During the school year, teachers work with individual pupils on skills deficits as indicated by the fall PRT/PMT test reports and students are encouraged to change minuses (deficits) to pluses (mastery) as this is evidenced by completion of certain day-to-day or unit tasks. Thus, we are already proceeding in the direction of the thrust of CBC, which emphasizes the concepts of individual differences, the individualization of instruction, skill mastery in the learning hierarchy and parental involvement.

Testing and assessment under CBC will include both criterion-referenced testing and norm-referenced testing. Norm-referenced testing is the critical grades of 3, 6 and 9, instituted this year, will continue. Criterion-referenced testing in grades 1-9, reading and mathematics, will also continue. However, since the PRT/PMT are based on the curriculum objectives in reading and mathematics that were developed in the early 70's and since new curriculum objectives are being developed under CBC, it follows that the PRT/PMT must be revised.

It is anticipated that the CBC Testing Program will be in effect in the fall of 1980-81.

Counseling and the Competency Curriculum

Susie B. Morgan
Director
Guidance and Counseling

For better or worse, those of us engaged in helping professions are now deeply immersed in the accountability movement permeating all phases of the educational enterprise. Public scrutiny is requiring us to respond to inquiries about what we are trying to do, how do we go about it, and how do we gauge our successes or failures. These questions may cause some professional educators and helpers self-consciously to withdraw in some trepidation; however, the majority will welcome this opportunity for self-examination, knowing that it can readily lead to improved definition and affirmative roles and objectives as well as stimulate the development of more effective delivery systems, training strategies, and certification procedures throughout the profession.

A major problem exists in guidance and counseling which is centered around identifying and clarifying the role of the counselor. Expanding federal and state programs and new legislation have assigned increasingly comprehensive roles to guidance and counseling professionals as they strive to meet the needs of additional groups of people in a variety of life situations.

In an attempt to clarify the role of the counselor, our intent is to refine the role. Here are some of the things we have done and are continuing to do in supporting the competency-based curriculum thrust in our school system:

1. Conferences have been held with the Division of Instruction staff with the objective of structuring, organizing, developing, and implementing support services.

2. Regional workshops on the counselor and CBC were conducted for all guidance staff at all levels to improve the effectiveness of the guidance programs.

3. At the building level, some counselors are chairpersons of the CBC teams, in an effort to train other counselors and reinforce guidance efforts.

4. An Ad Hoc Committee of counseling practitioners is developing into a Task Force to work realistically with competency-based goals and objectives to further enhance the guidance support for CBC. This Ad Hoc Committee has met with Bill Spady in order to take advantage of his tremendous research in the area of competency-based education.

5. One of our guidance programs is the Vocational Guidance and Placement Component. It is a supportive service program in six career centers and 12 comprehensive high schools. The primary goal of the program is to establish a developmental pattern of vocational guidance and placement services for students, designed to develop positive attitudes, self-awareness, vocational awareness and to provide vocational exploration and intensive job preparation. Career Advisors place students in the school work experience programs and provide permanent placement for seniors who wish to work directly upon graduation from high school. Presently the Vocational Guidance Component has developed its competency-based job preparation and skills instructional guide, and is waiting for approval of the draft.

6. The Student Facilitator's Program is a guidance program designed to provide peer counselors to work along with professional counselors in an attempt to relate to more students. Presently, there are thirty (30) students and eight (8) counselors in the program at Anacostia and Cardozo.

7. Assessment and measurements techniques are being initiated, developed and revised on an ongoing basis in an attempt to provide more realistic profiles of the special populations with whom we work. The Career Assessment Center located at Fletcher-Johnson is one of our guidance programs designed to assist special needs students in their educational and career planning. One of the goals of the Assessment Center is to assist secondary special needs students to identify their career interest and become familiar with job level requirements. A major goal of the Center is to test out the students' interests and abilities in job areas through hands-on tasks, and help them to look at their personal values and needs structure. The Center engages in psychometric testing, work sampling, critical observations of behavior and diagnostic probes.

8. The Widening Horizons Program is a career awareness-exploration program at the junior high school level. This program's instructional services provide the hub around which all other program services revolve. The Widening Horizons Program has an ongoing attempt to move career orientation beyond the confines of the classroom by allowing students to visit work sites on a regular basis. Students who have made tentative career choices are placed on volunteer jobs.

9. The Washington Street Academy works with our guidance programs to provide guidance and counseling to students 16-22 years old who have dropped out of our area secondary schools. This counseling program provides a differentiated staffing pattern, is self-paced and open-ended. It is also ungraded.

The major resolution to our major problem relative to clarity of counselor role must very seriously be directed toward training and personnel development. I recommend that we carefully, honestly and most sincerely look at a plan such as the following, to be done in conjunction with area colleges and universities and put guidance and counseling on the road to being unequivocally and totally supportive to competency-based curriculum and competency-based education.

This plan proposes a competency-based concept of training and the counselor role. While perfomance based programs are not unique, the development of an integrated approach to the preparation of support personnel that is founded on

a competency-based guidance and counseling career ladder is a totally new concept. It is believed that implementation of the career ladder will facilitate the work of the professional counselor and render the total guidance endeavor more accountable and viable.

The career ladder presents three distinct training levels for consideration: paraprofessional, preprofessional, and professional. Advancement from one level to the next may or may not be sequential. Paraprofessional level. On this level, adult personnel are interviewed and assigned tryout positions in the guidance offices. These personnel should possess certain competencies resulting from high school experiences or as the result of community college or adult education programs. They may serve as receptionists, clerks, typists, librarians, and general office workers. Distinguishing characteristics are that they like young people and relate well with them -- and that they are trainable. Persons at this level will begin on the career ladder as intern guidance assistants. After serving their internship, with or without salary, for a period of one to two years and following a thorough evaluation by the professional guidance staff, they may be awarded guidance contracts as guidance aides or assistants.

Preprofessional level. The preprofessional level differs form the paraprofessional level in that in order to climb to this rung of the ladder, further training is required. The first rung on this level is the intern guidance associate. This person will have completed a relevant community college program or two years of an appropriate college or university curriculum. He or she will be recruited at the end of the sophomore year for the junior-senior level training program designed specifically to prepare guidance associates. What is being suggested, in actuality, is an integrated four-year educational program focusing on the behavior sciences and counselor education. While it will be possible to prepare for a teaching career through this program, it is neither mandatory nor necessarily encouraged.

Professional level. This rung of the ladder denotes personnel who have been fully trained and who possibly possess some degree of specialization in specific areas of competence: e.g., the emotionally handicapped, special education, learning disabilities, vocational and technical, post-secondary, etc. Personnel on this level will assume

responsibility for supervision of guidance associates working under their direction, as well as providing direction for the paraprofessional guidance assistants. In order to advance to this rung of the ladder, the candidate must possess a master's degree in the field of guidance and counseling, must be endorsed by a college or university counselor education staff, as well as approved by the public school counseling staff who supervised the in-school internship experience of the program.

Counselors are facilitators of human development, and must possess certain skills and abilities allowing them to provide unconditional acceptance of behavior and value systems and to recognize how these systems influence behavior.

I have provided you with a somewhat skeletal plan which could reach fulfillment with intensive input from the practitioners. Here is a competency-based guidance program. I challenge you to challenge me to bring it to reality in support of our CBC efforts in the D.C. Public Schools.

Thank you!

Counseling and the Competency Curriculum

Nathaniel E. Hill
Assistant to the Director
Pupil Personnel Services

Today's model school program provides children four types of services: instructional, administrative, pupil personnel, and extra-curricular. While instruction is the most important, there is a greater need for effective pupil personnel services today than ever before. The increased complexity of educational and vocational planning, the rising intensity of detrimental influences upon the family, the moral pluralism characterizing our society, the rapidity of change and the information explosion, all indicate that pupils will need more, not less help in coping with their development. Throughout the nation, attendance workers, counselors, psychologists, and social workers are attempting to meet the individual needs of pupils.

Supportive and facilitative in nature and scope, pupil personnel services are for all children in the schools: children experiencing normal problems of development; and those whose problems require more intensive and specialized help, e.g., the handicapped, the gifted and the socially and economically deprived. Along with teachers and other educational personnel, pupil personnel service workers augment the school efforts to:

- create an effective climate for learning;
- integrate and utilize all available information on each child pertinent to the educational process;
- identify educational experiences appropriate to the unique characteristics of the individual pupil;
- protect each child's individuality, his right to self-determination and his right to be respected;
- help each child achieve and facilitate his optimal development.

In the recent past and in the foreseeable future, the demands of the Mills Decree and P.L. 94-142 will require school psychologists and school social workers to spend increasing amounts of time in more intensive individual diagnosis. However, these pupil personnel service workers, as well as counselors, have responsibilities much broader than that of diagnosticians. These broader responsibilities include:

- revealing the uniqueness of the individual and his/her needs through comprehensive evaluation;
- consulting directly with staff, parents and students, in developing problem-preventing and optimal growth inducing prescriptions for specific children as individuals and groups;
- making recommendations for planning, implementing and maintaining problem-preventing and optimum growth-inducing programs on a system-wide basis;
- directly aiding and stimulating individuals in accomplishing self-actualization;
- providing services to children and their families in order to eliminate or reduce the impediments which effect children's capacity or movtivation for learning;
- providing services to assist in the accomplishment of the purposes and objectives of the Competency-Based Curriculum.

The non-discriminatory assessment and evaluation requirement of P.L. 94-142 means that educational decisions are to be made on the basis of formal and informal data gathered from a variety of sources and interpreted in the light of a child's socio-economic background. The variety of sources from which data are to be gathered and synthesized include schools, psychologists, social workers, attendance workers, counselors, teachers, parents, pupils and, where appropriate, representatives from community health and social agencies. P.L. 94-142, therefore, has implications for the handicapped and non-handicapped as well.

The CBC concept stresses the need for assessing the developmental stage as well as the learning potential and state of readiness of the student before any performance objectives are determined, selected or assigned. The assessment of "gaps" in the student's potential for understanding a new task also must be identified for remedial intervention before the new learning experience takes place. A diagnosis of cognitive, psychomotor skills as well as other dimensions in the affective domain are relevant to any learning process. In regard to the objectives to be mastered, it is necessary to analyze the objectives and tasks to be performed in order to identify the skills needed for mastering the learning of these objectives and tasks. What human capabilities are necessary for each performance objective? The expected performance must match the student's potential. If the task is far above the student's capabilities, this could generate frustration and therefore lower the level of motivation. On the other hand, if the task is much below the student's potential, the result may be boredom and lack of interest in what he is learning. The process of assessing the student's readiness and potential requires specific professional skills such as those of the school psychologist.

It is apparent that the CBC calls for a very relevant role for the school psychologist. The school psychologist assesses and evaluates the student to identify his/her stage of development, potential for learning as well as the state of readiness and assists the teacher in identifying the objectives and tasks that would be more beneficial for the student's unique situation. For this purpose the school psychologist assists the teacher in making the necessary adjustments in the curriculum to meet the needs of each student.

Professional social work is defined as intervention at the interface of the individual with the social environment. If the social environment is to be conceived as a discrete unit such as a social institution, then the school age child, as part of the family in interaction with the educational institution, can be considered as one of the most classical and prevalent of social interaction in our society.

The school social worker brings to the educational setting work skills which can provide assistance to make the educational experience a reality for the child.

The family environment affects the student's learning process, promoting it or interfering with it. The school social worker plays a very important role of creating within the family an adequate learning environment for the student by means of: 1) systematic observation and assessment of needs and characteristics with student characteristics; 2) collection of appropriate information to document aspects of the biological, psychological, cultural, sociological, emotional, legal, and environmental factors that affect the learning process of the student; 3) skills in determining and applying the most appropriate methods and techniques of social work intervention to enhance learning opportunities for the student; 4) effective collaboration with pupil service team members; 5) skills in maintaining an effective liaison between student's home and school; 6) skills in curriculum development in areas of social work expertise, such as mental health, use of relationships, use of community resources, and dynamics of family life.

The CBC approach places the main emphasis in the personal characteristics of the child. The home environment is one of the major factors in shaping the personal characteristics of the student. Any intervention such as the social worker may interpose that tends to make the home environment more suitable for learning is positively contributing to the success of the CBC approach. In addition, the social worker may provide individual or group counseling with students and/or parents regarding the student's special educational needs, potential, school resources, and progress through the various levels of the educational system.

The new system-wide Attendance Awareness Program, developed and implemented by the School Attendance Branch, lends support to the school system's CBC thrust.

Without students present in the classroom, new curricular efforts are futile attempts at making the school a place children desire to be. The major goals of the attendance program are to prevent the development of poor habits of school attendance and to intervene and remediate poor school attendance habits already established.

The role in the model of the attendance officer, regardless of the instructional program employed by the school system, remains essentially one of support to that instructional program. This role includes assisting in the development of attendance programs which 1) prevent the development of poor habits of school attendance, 2) intervene when poor habits of school attendance have developed, and 3) seek to remediate the causes of poor school attendance.

The school system has established a curriculum thrust which provides an educational setting within which each student is viewed as a valuable human being capable of contributing his/her unique gifts to the community. The Competency-Based Curriculum, hopefully, provides the incentive for students to view school as a place where something of value to him/her is taking place.

The development and implementation of a system-wide Attendance Awareness Program heightens the awareness of the attendance officer's role in the educational process. The attendance officer is viewed as just one individual in the school community that is responsible for the daily attendance of students. The program emphasizes the necessity of teachers, counselors, psychologists, social workers, and administrators interaction with the attendance officers to effect a student's regular attendance at school.

The counselor in the local school constitutes an important support service for the prevention, intervention and remediation of factors to poor school attendance. The counselors and attendance staff work collaboratively to seek to remedy home and school situations which are impacting on the

student's school achievement and attendance, i.e., placing the student in an alternative educational setting, obtaining aid for the child in terms of clothing, carfare, medical attention, etc., and providing individual and group counseling to bring about positive school adjustment.

Regular school attendance is a measurable objective relating to pupil behavior which may reflect the effectiveness of Competency-Based Curriculum. The attendance staff has become a part of the Competency-Based Curriculum Teams at the pilot schools and seeks imput from the team in resolving attendance-related problems.

Attendance officers can be utilized as advocates of the CBC thrust of the school system. In their contacts with parents and students, they can emphasize the value of a CBC instructional mode and encourage students to try it before they reject it.

We have a continuing responsibility to meet the varying needs of all students. This responsibility, by necessity, must extend beyond the provision of what we call the "basic academics" to the provisions of supportive services that assist in maximizing the total development of each student.

I wish to make the following recommendations:

- That consideraton be given to an increase in the pupil personnel staff in order to meet the mandates of P.L. 94-142 and the Mills Decree.
- That, as part of The Action Plan, there should be an expansion of pupil personnel services into a extended day which would have the following goals:
  - -- to provide a referral service for parents seeking general school related information;
  - -- to provide parent consultation and counseling;
  - -- to provide an opportunity for parents to confer with appropriate staff regarding school attendance and/or truancy;

- to provide information concerning child growth and development through consultation with parents to assist them in understanding the learning and adjustment processes of children;

- to provide an opportunity for consultation with parents to assist in the interpretation of behavioral difficulties in order that a program may be devised for the benefit of the child;

- to provide educational and vocational counseling services;

- to provide information relative to job opportunities;

- to provide an opportunity for consultation with parents in order to render services of a prevention-remedial nature to include direct guidance to parents, developmental diagnosis, school or class placement, and long term follow-up;

- to develop IEP's on a need basis;

- to provide information to parents concerning existing alternative educational programs.

The Division of Pupil Personnel Services has a commitment to facilitate the growth of each student by complimenting and supporting the Competency-Based Curriculum and the position statement, "A Program for Excellence, Efficiency and Effectiveness". . .the systematic thrust of the District of Columbia Public Schools.

Assessment of Life Skill Competencies through Applied Performance Testing

Ruth S. Nickse
Developer: New York State Competency-Based External Degree Program
President: Nickse Associates

The concept of a Life Skills diploma for adults is a result of poineering work by New York State to create an alternative to traditional paths to earning a high school credential. Similar models have been adapted by states such as Texas, Wisconsin, Oregon and Maryland.

The diploma program is a competency-based applied performance assessment system which rewards adults with a high school diploma for the demonstration of required competencies regardless of where, when or how they were learned.

The assessment system recognizes two kinds of competencies: Generalized Competencies in Life Skills areas (math and reading; consumer, scientific, citizenship and health awareness; and occupational preparedness) and Individualized Competencies in the areas of occupational preparedness, college readiness or specialized skills such as music, art or photography.

Unique characteristics of the applied performance assessment assigned to meet the needs of busy working adults are these: it is an open-testing technique with take-home exams; characterized by flexibility and self-pacing; uses oral as well as written communication modes with explicit understanding and open discussion of required competencies; and gives continuous feedback to candidates on their progress. The program stresses application of basic skills to solve common problems of adult life, i.e., how to find a new place to live, preparation for finding a job and how to make an informed consumer purchase.

Such a program is based on assumptions about adult learners -- that they are competent by virtue of having lived, worked, raised families, and contributed to the community; that they can document their learning in required areas; and that they deserve the opportunity to demonstrate their skills in tasks relevant to adult life. The success of this learner-centered approach to credentialing adults is evidenced by the numbers of graduates of all ages from the program and the low drop out rate.

Implications for secondary schools from this experience include these:

- There is a need for continuous, non-threatening assessment of competence starting in early grades to identify both progress and problems and to create alternative instructional strategies.
- Clear instructional goals must be made explicit to students and required outcomes should be related to age and interest of students.
- Provision should be made for unlimited opportunity for students to challenge exams whenever they feel ready.
- Certification should be based on performance, not on seat time.
- Trust and support should be an integral part of teaching and testing.
- Schools must emphasize LEARNING (not LEANING) behaviors -- the "r" in LEARNING stands for student responsibility -- insist on putting it back into education.

Reactions to Educational Forum

April 7 and 8, 1978

SUMMARY

The objectives of the Educational Forum held by the D.C. Public Schools in April 1978 were as follows:

- To provide an intellectually stimulating program
- To provide information on the current status of CBC/CBE
- To present directions for the future in CBC/CBE
- To provide for interaction among participants.

A survey was conducted by the Division of Research and Evaluation to determine the effectiveness of the program of the Education Forum in meeting its objectives. A survey form was mailed to each person who registered for the Forum. Response was received from one hundred nineteen participants. Of that number, ninety-eight, or eighty-two percent, indicated they were employees of the D.C. Public Schools. Respondents represented the following groups:

- Board of Education
- Board of Trustees, University of the District of Columbia
- City Council
- Council of School Officers
- Metropolitan Educational Council for Staff Development
- Washington Teachers' Union
- Office of the Superintendent
- Office of Educational Programs and Services
- Office of Instruction
- Office of Management Services
- Office of State Administration
- Regions I - VI
- Student Affairs Branch
- NIE
- USOE

Participants indicated their reactions and opinions by rating the degree to which the objectives were met in each of seven Forum sessions, by rating various other aspects of the overall Forum, and through appropriate comments and suggestions.

A consensus of opinions was determined by computing percentages of total ratings by all participants responding and by group affiliation. Differences among groups were not significant.

The following represents the consensus of Educational Forum participants responding to the survey:

- On a rating scale of low to high, each of the following categories received a "high" rating: (These are not in rank order of highest to high)

  New information was provided
  Sessions were intellectually stimulating
  Sessions provided information on the current status of CBC in the D.C. Public Schools
  Sessions provided a thrust for future directions in CBC/CBE
  Sessions provided a future direction for CBC/CBE in the D.C. Public Schools

- Time allocated to the sessions was "appropriate."

- The facilities were "outstanding."

- The objective "to provide an opportunity for interaction among the participants" was partially, or "somewhat" met.

- The overall Forum was "good."

- The days of the week were "convenient." However, thirty-one respondents stated that Saturday was an inconvenient day.

- The majority were in accord with the Friday hours, 8:00 A.M. - 4:00 P.M. Although a majority indicated agreement with having the Forum on Saturday from 7:00 A.M. to 3:00 P.M., thirty-four participants felt that 7:00 A.M. was too early.

Many additional comments and suggestions were made by participants, however, most were cited by only one person. Those comments cited by three or more persons are listed below. The number in parenthesis indicates the number of participants giving the comment.

- Provide more time for group interaction (7)

- Continue the Forum on an annual basis (6)

- Have more small group sessions (4)

- Give more teachers an opportunity to attend (4)

- More community participation is needed (3)

Prepared by Division of Research and Evaluation May 1978

Public Schools of the District of Columbia

REACTIONS TO EDUCATIONAL FORUM, APRIL 7 AND 8, 1978

The school administration is interested in acquiring information about the reations of all participants in the 1978 Educational Forum. Below are statements and questions to which we would appreciate your response. Attached is a copy of the program for reference purposes.

1. Please indicate below your response by placing an "X" in the columns for each session.

Session	Participation		Degree to which information new to me was provided					Degree to which session was intellectually stimulating to me					Degree to which session provided information on the current status of CBC in the D.C. Public Schools					Degree to which the session provided a thrust for future directions in CBC/CBE					Degree to which the session provided a future direction for CBC/CBE in the D.C. Public Schools					Extent to which the time allocated to the session was appropriate		
			Low				High	Low				High	Low				High	Low				High	Low				High			
Designation	Did Attend	Did Not Attend	1	2	3	4	N.A.	1	2	3	4	N.A.	1	2	3	4	N.A.	1	2	3	4	N.A.	1	2	3	4	N.A.	Appro-priate	Too Short	Too long
A. Second Session																														
B. Third Session																														
C. Speaker Mary F. Berry																														
D. Fourth Session																														
E. Fifth Session																														
F. Sixth Session																														
G. Speaker Ruth Nickse																														

Note: N.A. means not applicable.

2. How do you rate the facilities that were provided for the Educational Forum? Outstanding ___ Good ___ Fair ___ Poor ___

3. Were the days of the week on which the Educational Forum was held convenient for you?

Yes ___ No ___ Comments or suggestions _____

___ ___ _____

4. Were you in accord with the hours for which the Educational Forum was scheduled? (8 a.m. - 4 p.m. Friday)
(7 a.m. - 3 p.m. Saturday)

Yes ___ No ___ Comments or suggestions _____

___ ___ _____

(Continued on next page)

5. One of the objectives of the Educational Forum was to provide an opportunity for interaction among the participants. Do you feel that this objective was met?

Yes	No	Somewhat
___	___	___

6. How would you rate overall the Educational Forum?

Outstanding	Good	Fair	Poor
___	___	___	___

68

7. If you wish, please make additional comments and suggestions below. (If more space is needed, use back of page).

_____

_____

_____

_____

8. I was extended an invitation to attend the Educational Forum through the following group:

(Please check "X: only one category)

Board of Education	___	Office of the Superintendent	___
Board of Trade	___	Office of Educational Programs and Services	___
Board of Trustees, University of the District of Columbia	___	Office of Instruction	___
City Council	___	Office of Management Services	___
Council of School Officers	___	Office of State Administration	___
Department of Corrections	___	Regions I - VI	___
Metropolitan Educational Council for Staff Development	___	Student Affairs Branch	___
PTA or HSA	___	NIE	___
		USOE	___
Washington Teachers' Union	___	Other (Please specify)_____	

9. I am currently employed in the D. C. Public Schools.

98

Yes	No
___	___

99

Prepared by
Division of Research and Evaluation
April 10, 1978

Forum Steering Committee

Vincent E. Reed

Elizabeth C. Yancey

Co-Chairpersons

Joan W. Brown
Mildred P. Cooper
Clive W. Covington
Delores T. Davis
P. Gary Freeman
J. Weldon Greene
Elaine C. Melmed
Wilbur A. Millard
Norman W. Nickens
Conrad P. Smith
William G. Spady
Harris M. Taylor

James T. Guines

Food Services -- Joseph M. Stewart, Director

Forum Reception

Hyatt Regency Hotel

Coordinators

J. Weldon Greene
Director, DOP

James T. Guines
Associate Superintendent, OI

Latinee G. Gullattee
Executive Assistant, OI

Donald L. Monroe
Program Director, ITV

Anne W. Pitts
Executive Director, ESEA Title I

Harris M. Taylor
Associate Superintendent, OSA

Sponsors

Alpha II, Inc.

C.T.B./McGraw Hill

General Electric

McCarthy Manufacturing Co. Inc.

Professional Products, Inc.

Westinghouse Learning Corporation

Contributors

Addison Wesley Publishing Company

Educational Sales Representatives Association

Encyclopedia Britannica Educational Corporation

INPACT

Government Marketing Service

Norman R. Selinger and Associates, Inc.

Nystrom